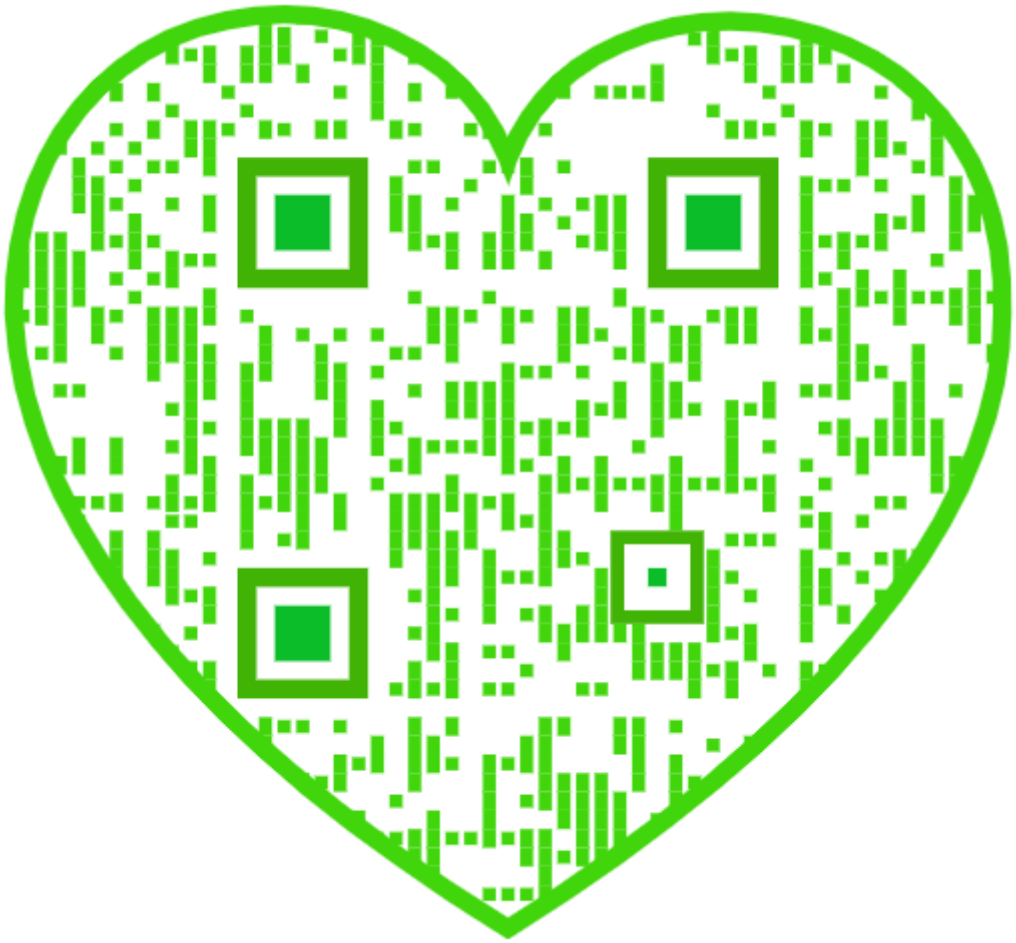

ELEMENTARY ECONOMICS

WITH SPECIAL REFERENCE TO SOCIAL AND BUSINESS CONDITIONS IN THE UNITED STATES

BY

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TO THE GREAT ARMY OF HIGH SCHOOL PUPILS

WHO ENTER INDUSTRY EVERY YEAR

THIS BOOK IS RESPECTFULLY

DEDICATED

PREFACE

RECENT events have brought the people of the United States face to face with numerous new economic problems, many of which are likely to remain unsolved for years to come; besides, they have complicated to a marked degree those old problems which were pressing for solution at the outbreak of the Great War. In consequence, our leaders are becoming more and more convinced that increased attention should be given in our secondary schools to a serious consideration of the fundamental principles on which these problems rest.

Such a conviction is a new one in many quarters, for hitherto the notion has very generally prevailed, especially among university teachers, that no formal study of the Principles of Economics should be undertaken before the sophomore year in college. Obviously such a notion carries the implication, unconscious perhaps, that the fundamentals of Economics, even in their simplest forms, should be withheld from the great mass of young men and women engaged in industry, and restricted to the select few who are able by one means or another to become college students. Such a notion not only carries vicious implication, but it also is ill founded; for hundreds of high schools the country over prove by experience that their pupils are fully capable of grasping the elements of economic science when presented concretely and in a way to show their relationship to practical affairs.

The public high school is now the "finishing school" of the typical leader of American life, and it is likely to continue to perform that function for another generation at least; and just so long as this condition prevails our high schools cannot, if they

would, escape the responsibility of presenting squarely and as fully as possible the elementary principles that govern our everyday business actions.

Since the great bulk of the leaders of to-morrow can have no other academic training in economic principles than that gained in the public high school, it is highly essential that the textbook placed in their hands should be something more than an introduction to a college course to be pursued two or three years hence. It should, with due regard for the capacities of high school pupils, endeavor to introduce its readers to the principles that underlie business and determine in large measure the practices of the business world.

In preparing this text I have had four ideals in mind: to choose for discussion only those topics which are fundamentally important; to push the discussion of laws and principles to a point where every serious-minded high school pupil would feel a real mental challenge; to illustrate every law and principle by references to historical events and to everyday experiences, and by the use of graphic material; and finally, to show the relation of each law and principle to the industrial activities in which practically every high school boy and many of our girls must engage.

In keeping the viewpoint of the high school I have had the assistance of teachers in secondary schools of various types in all sections of the country; and for their kind and disinterested coöperation I take pleasure in expressing my sincere appreciation. I am under special obligation to one of my colleagues, Dr. M. H. Hunter, who has read and criticized the entire manuscript, and rendered invaluable aid in preparing the Exercises and Problems that accompany each chapter.

CHARLES MANFRED THOMPSON

URBANA, ILLINOIS
June 1, 1919

TABLE OF CONTENTS

PART I. INTRODUCTION — ECONOMICS AS A SOCIAL SCIENCE

CHAPTER PAGE

I. THE SOCIAL VIEWPOINT

1. The Social Sciences 3
2. The Individual and Society 6
3. Wealth and Welfare 9
Exercises and Problems 12
Supplementary Reading 15

II. NATURE AND CONTENT OF ECONOMICS

4. Nature of Economics 16
5. Divisions of Economics 19
Exercises and Problems 24
Supplementary Reading 26

PART II. CONSUMPTION OF ECONOMIC GOODS

III. NATURE OF CONSUMPTION

6. Motives behind Economic Activity 29
7. Nature of Demand 32
8. Elasticity of Demand 34
Exercises and Problems 38
Supplementary Reading 39

IV. LAWS OF CONSUMPTION

9. Human Wants Are Unlimited 40
10. The Law of Diminishing Utility 44
11. The Law of Marginal Utility 46
Exercises and Problems 52
Supplementary Reading 53

CHAPTER PAGE

V. DEMAND, SUPPLY, AND PRICE

12. Relation of Demand and Supply to Price . . . 54
13. Determination of Market Price 56
14. The Competitive Market Price 59
Exercises and Problems 64
Supplementary Reading 66

VI. SOME PRACTICAL ASPECTS OF CONSUMPTION

15. Harmful Consumption 67
16. Unwise Consumption 69
17. Conservation and Thrift 72
18. Substitution 78
Exercises and Problems 79
Supplementary Reading 81

PART III. PROBLEMS OF PRODUCTION

VII. ORGANIZATION OF INDUSTRY

19. Historical Background 85
20. The Single Enterpriser and the Partnership . . 88
21. The Corporate Form of Organization 90
Exercises and Problems 95
Supplementary Reading 96

VIII. DIVISION OF LABOR AND LARGE-SCALE PRODUCTION

22. The Factors of Production 97
23. Division of Labor 100
24. Territorial Division of Labor 106
25. Large-Scale Production 108
Exercises and Problems 111
Supplementary Reading 113

IX. LAND (NATURAL RESOURCES)

26. Land as a Productive Factor 114
27. Natural Resources of the United States . . . 118
28. The Law of Diminishing Returns 122
Exercises and Problems 128
Supplementary Reading 129

CHAPTER PAGE

X. Capital as a Factor in Production

29. Source of Capital 130
30. Nature of Capitalistic Production 132
31. Different Kinds of Capital 134
Exercises and Problems 138
Supplementary Reading 140

XI. Competition *versus* Monopoly

32. Impetus of Competition 141
33. The Law of Monopoly Price 145
34. Limitations on Monopolists 147
Exercises and Problems 151
Supplementary Reading 153

XII. Transportation

35. Stages in the Development of Transportation in the United States 154
36. Railroad Competition 158
37. Rate-Making 161
38. Government Regulation of Railroads . . . 162
Exercises and Problems 166
Supplementary Reading 168

XIII. Marketing the Products of Industry

39. Separation of Producers and Consumers . . . 169
40. Indirect Methods of Marketing 170
41. More Direct Methods of Marketing 176
Exercises and Problems 179
Supplementary Reading 182

XIV. Government and Production

42. Patents, Copyrights, and Trade-marks . . . 183
43. Regulation of Industrial Monopolies 186
44. Regulation of Public Utilities 190
45. Fixing Prices 192
Exercises and Problems 193
Supplementary Reading 195

PART IV. THE EXCHANGE OF ECONOMIC GOODS

CHAPTER PAGE

XV. Use of Money in Making Exchanges

46. Characteristics of a Good Money 199
47. Uses of Money 202
48. Kinds of Government Money 205
Exercises and Problems 210
Supplementary Reading 212

XVI. Monetary Laws Illustrated From the History of the United States

49. Some Important Monetary Laws 213
50. Monetary History of the United States . . . 216
Exercises and Problems 224
Supplementary Reading 226

XVII. Banking and Its History

51. Development of the Principle of Banking . . 227
52. Different Kinds of Banks 229
53. A Bank Statement 231
54. Banking in the United States 233
Exercises and Problems 238
Supplementary Reading 240

XVIII. Domestic and Foreign Commerce

55. Nature and Volume of the Trade of the United States 241
56. Paying Trade Debts 243
57. The Balance of Trade 247
Exercises and Problems 253
Supplementary Reading 255

XIX. The Tariff in the United States

58. Historical Sketch 256
59. Basis of Free Trade 262
60. Economic Arguments for Protection . . . 263
61. Protection and Nationalism 264
Exercises and Problems 265
Supplementary Reading 268

CHAPTER PAGE

XX. Fluctuations of the Price Level

62. Effects of Fluctuating Prices 269
63. Measurements of Price Fluctuations . . . 272
64. Price Level and Industry 274
Exercises and Problems 277
Supplementary Reading 279

PART V. DISTRIBUTION OF THE SOCIAL INCOME

XXI. Distribution of Wealth in the United States

65. Differences in Wealth and Income 283
66. Some Social Problems Arising from Distribution . 287
67. Proposed Solutions 291
Exercises and Problems 292
Supplementary Reading 294

XXII. Return to Labor (Wages)

68. Noncompeting Groups of Workers 295
69. Efficiency and Wages 303
70. Methods of Wage Payment 306
Exercises and Problems 308
Supplementary Reading 310

XXIII. The Labor Problem

71. Rise of Organized Labor 311
72. Aims and Methods of Organized Labor . . . 313
73. Methods of Settling Labor Disputes . . . 319
74. Labor Legislation 321
75. Foreign Immigration 323
Exercises and Problems 326
Supplementary Reading 329

XXIV. Return to Land (Rent)

76. Nature and Source of Agricultural Rent . . . 330
77. Urban Rents 334
78. Economic Rent and Price 338
Exercises and Problems 341
Supplementary Reading 344

CHAPTER PAGE

XXV. Return to Capital (Interest)

79. Interest Peculiar to Modern Industry . . . 345
80. Why Interest is Paid and How Much . . . 346
81. Variations in the Interest Rate 351
Exercises and Problems 353
Supplementary Reading 355

XXVI. Return to the Business Man (Competitive Profits)

82. Place of the Business Man in Industry . . . 356
83. The Nature and Source of Profits 359
84. Coöperation and Profits 363
Exercises and Problems 366
Supplementary Reading 368

XXVII. Socialism

85. Nature and Purposes of Socialism 369
86. Criticisms of the Socialistic Program . . . 374
87. Some Substitutions for Socialism 377
Exercises and Problems 379
Supplementary Reading 381

XXVIII. Social Insurance

88. The Risks of Industry 382
89. Kinds of Social Insurance: Europe . . . 386
90. Progress and Outlook of Social Insurance in the United States 389
Exercises and Problems 393
Supplementary Reading 396

XXIX. The Share of the Government in Distribution (Taxation)

91. Government Revenues and Government Expenditures 397
92. Bases of Taxation 401
93. Kinds of Taxes 404
Exercises and Problems 407
Supplementary Reading 410

Classified Course of Reading 411

Index 415

PART I

INTRODUCTION

ECONOMICS AS A SOCIAL SCIENCE

ELEMENTARY ECONOMICS

CHAPTER I

THE SOCIAL VIEWPOINT

1. The Social Sciences

Nature and content of the social sciences. — The subjects of study that deal with the various phases of human activity, *as expressed in social groups*, are known as the social sciences. Those which we may profitably notice in this connection are history, ethics, government, law, sociology, and economics.

History brings to us from the past the record of social achievement, which, if properly interpreted, serves as a guide for present action and assists to forecast the future. History is not merely, as an eminent English historian once wrote, past politics; it is a great deal more. It is, so to speak, the foundation on which all the other social sciences are built, since a complete understanding of any one of them depends on a correct knowledge of past events and past developments.

Ethics is concerned with the human duties of mankind; with the application of the golden rule to human relations. Every day we hear professional men speak of the ethics of their respective professions. A physician, for example, is guided in his professional acts by an elaborate code of medical ethics. Likewise the lawyer, the surgeon, the dentist, and the teacher, each has the ethical standards of his group to follow and to maintain.

A third social science is *government*, or political science, known in the high school as civics. This science deals with the govern-

ment of social groups as expressed in constitutions and in the administration of laws, and with numerous other social aspects, as political conventions, primaries, and elections. Closely akin to political science is *law*, which concerns itself primarily with laying down definite rules to govern individuals in their relations with each other and with the state.

Another social science is *sociology*, which, in its narrow sense, deals with the distinctively social relations among individuals. Consequently, the chief concern of sociologists is with the social welfare of the people. To that end they engage not only in a study of the causes that produce inequalities, but also in an attempt to better social conditions. Theirs is a very practical work which leads them into the homes, as well as into the social centers now to be found in all large cities. It is well to notice in passing, however, that some authorities use the term "sociology" in a broader sense to include all the social sciences.

Still another social science is *economics*. Unlike those already mentioned, this science deals largely with the material aspects of life. It tries in a scientific spirit *to explain the activities of mankind in securing a living; to study man as a wealth-getter and a wealth-user;* to account for the motives and forces that constantly appear in the business relations of the world. Because of the materialistic viewpoint which economics must necessarily take, many writers and teachers consider it to be a mean science, "dismal," selfish, and even sordid. They forget, however, that the average man, irrespective of his occupation or station in life, must produce goods as well as consume them; that he cannot, if he would, avoid intimate business contact with his fellow men and with his surroundings; and that his opportunity to enjoy the higher things of life must follow after, and wait on, the satisfaction of his more materialistic needs.

Close interrelation of the social sciences. — We have spoken of the social sciences as if they were independent and distinct one from the other. Such, however, is not the case, for they are merely different aspects of the same science, each regarding society from its own particular viewpoint. Yet, since the human mind cannot grasp the social field as a unit, it has been found desirable to treat them as distinct sciences. In other words, we deal with the various social sciences as independent subjects of study for the sake of convenience and a clearer understanding. Consequently, in our colleges and universities, where ample opportunity is given for research and specialization, they have been developed independently under the direction and guidance of highly trained specialists. We must remember, however, that in spite of this development the study of society and social relationships is in itself a complete and single science.

Numerous examples of this close relationship are to be found on every hand. Foreign immigration, to illustrate, commands the attention of the historian, the political scientist, the sociologist, and the economist. The historian accounts for the events and developments that have caused millions of men, women, and children to migrate from their old homes in Europe to America. The political scientist is chiefly concerned with the immigrant's knowledge of the forms and purposes of government, with his attitude toward American democracy, and with his influence on American politics. The sociologist studies the more distinctly social questions connected with immigration, such as housing conditions, standards of living, morals, education, and entertainment. Lastly, the economist approaches the subject from the standpoint of industry, concerning himself with the effect of immigration on such things as wages, production of wealth, and foreign trade. Each specializes on a small portion of the subject — too often as if it were the *whole*

subject — but it requires the combined labors of all to produce a complete and accurate account.

Some subjects, such as the Constitution of the United States, or negro slavery, for example, belong so exclusively to one or another social science as to make it appear that treatment under any other one is impossible. Obviously, the political scientist has the chief interest in the former, while the historian claims the latter. Nevertheless the economist must not neglect either. Without a proper understanding of the Constitution he could not account clearly for the various economic developments in such fields as labor legislation, interstate commerce, the protective tariff, money and banking; and no description of negro slavery can ever be complete which fails to take in consideration the economic environment in which it developed, its profitableness and unprofitableness, or its effect on the free labor with which it competed.

2. The Individual and Society

The individual viewpoint of industry. — The normal individual very naturally regards all industry from his own narrow point of view. He is inclined to feel that *his* business is the hub of industrial activity, that it is essential to the welfare of society, and that it even deserves encouragement at the hands of the government; and this feeling he often has regardless of the best interests of society. A short wheat crop with high prices may bring joy to the wheat farmer, though it may bring distress to multitudes of consumers. Likewise, the glaziers in the neighborhood of numerous greenhouses may welcome a severe hailstorm as a blessing, when obviously it is detrimental to society as a whole. Even those whose special duty it is to regard industry from the social point of view often fall into the same error. Every winter metropolitan newspapers view heavy falls of snow as godsends to the unemployed men of the cities, who, as a

result, are able to find work cleaning streets and sidewalks. Such erroneous notions arise from the practices of modern society, in which each individual produces not for his own direct consumption, but for the markets. It would be different if each supplied his own wants directly by his own labor. The wheat farmer would view a short crop with alarm; the glazier would see no blessing in a hailstorm that compelled him to repair his own greenhouse; nor would the residents of any city regard a heavy snowfall as a godsend if each man were compelled to shovel the snow from his own doorway.

Social viewpoint of industry. — While it must be admitted that the individualistic, or selfish, viewpoint of industry is the force that drives men to seek improved methods, we must not lose sight of the fact that the welfare of society is more important than that of any individual or group of individuals; and that no individual claim for preferment can stand as an obstacle in the way of social betterment. This broader viewpoint, the viewpoint of society, has made steady headway during the past generation. Not many years ago industrial leaders took the ground that it was none of society's affair how they conducted their own business. Now they think and act differently — they recognize their responsibilities to society. Recently one of America's best known captains of industry made the public statement that in the operation of his business and in the use of his wealth, he considered, not alone his own desires and needs, but also the desires and needs of society. The same spirit has permeated other industrial groups. Professional men, farmers, small business men, labor organizations, and even unorganized labor are catching the spirit that, while American democracy stands back of every individual in his efforts to be successful and happy, his success and happiness must not be acquired at the expense of the success and happiness of society at large.

Because of these different viewpoints the economist and the

business man are inclined to disagree, and too often they have a mutual disregard for each other's opinions. The economist is likely to regard the business man as selfish and self-centered, while the business man looks on the economist as a dreamer, and on his plans as visionary and impracticable. Both are right and both are wrong. The business man *as such*, if he is to succeed in a large measure, must conduct his business as if it were all-important, while the economist, on his part, must include society as a whole in his field of investigation, and formulate principles regardless of individual desires and purposes.

Industry and free public education. — The interest of society in private industry is one of the chief reasons for the establishment and maintenance of free public education. Clearly, children as well as their parents have the correct notion that school attendance increases the chances for higher individual incomes in after life. Almost all college students, and, it is safe to say, a majority of high school pupils, particularly boys, frankly admit, when questioned on the subject, that they attend school primarily to prepare themselves for better-paying places in the industrial world than they otherwise could expect to get. They are encouraged to take this view by educators and teachers who dwell on the fact that each day a boy spends in high school or college adds ten dollars or more to his income in after life. The desire to increase one's earning power is laudable enough, but may we not properly ask: Can the expenditure of public money be justified, from an economic point of view, on the ground that it will assist individuals to increase their own incomes? The answer involves the two aspects of industry — individual and social. Society appeals directly to the narrow motives of the individual, we may say — not improperly — to his selfishness. It gives him, at public expense, the opportunity to prepare himself to earn more than

would otherwise be possible, knowing full well that in the long run he will normally return to society, through increased production, not only the cost of his training and education, but also something in addition.

An efficient industrial society. — In spending enormous sums on public education, society has in mind an improved citizenship from the standpoint not only of culture and government, but also of industrial efficiency. At one time education stood almost exclusively for a higher appreciation of literature and art. Later it stressed the need of a better and a clearer understanding of the working of the government. Now society demands that the possessor of an education, in addition to being cultured and versed in the science of government, shall be industrially efficient. To that end commercial courses, commercial high schools, technical schools, and technical colleges in the universities have been established. Also the courses in the so-called literary schools and colleges have been changed to meet the new demand. There is nothing alarming in this educational tendency. It merely means that the next generation will value not less highly the cultural development and the stir of civic duty that comes from study in schools and colleges, but rather that it will also appreciate the need of an increased industrial efficiency and prepare itself through education and training to meet that need.

3. Wealth and Welfare

Free goods and economic goods. — The word "good" has two slightly different meanings. When a business man speaks of goods he means commodities, such as hay, wheat, clothing, and furniture. The student of economics gives the same word a broader meaning. He includes not only commodities, but also personal services rendered by domestic servants and others. No serious confusion, however, is likely to arise from this

difference of meaning, for the laws and principles applying to commodities very generally apply to personal services.

It is much more important to distinguish between free goods and economic goods. A free good is a gift of nature, supplied without labor and without limit. Economic goods, on the other hand, are characterized by their scarcity as compared to the demand for them. The best examples of free goods are air and sunlight, though in exceptional cases these may become economic goods. Water in a brook or spring may also be considered as free, despite the fact that some effort is always necessary to secure and utilize it. Free goods are extremely important in the life of human beings, yet the chief attention of students of economics must be directed toward economic goods.

Nature of wealth. — In discussing wealth two important facts must be kept constantly in mind. First, the wealth of an individual may or may not be wealth in a social sense. Second, an increase in wealth may, owing to increased prices, be accompanied by a decrease in the world's supply of commodities. On first thought most of us would say that the wealth of any society is composed of the total wealth of its individual members. Such, however, is not the case. The execution of a real estate mortgage, while it places in the hands of the owner evidence of wealth from which he may derive an income, has not added a single item to the wealth of society. It shows merely that one party has temporarily given up his command over a portion of social wealth, which in most cases of this kind is money. Some forms of individual wealth may even represent a positive decrease in social wealth. Such are government bonds sold to carry on war. Clearly, then, it is a mistake to attempt to estimate the total wealth of any large social group by adding the wealth of its individual members.

Nor does an increase in social wealth necessarily indicate that there has been an increase in the number or amount of com-

modities possessed by this same society. Here again we are likely to be misled by our first thoughts on the subject. An over-abundance of wheat, for example, though it should make bread cheap and plentiful, might well cause the total value of the wheat to be less than would be the case if but one-half or one-third of the amount had been raised. Conversely, a shortage in wheat might well raise the value of the total crop, also the value of the land on which it is produced, far above the values based on normal yields. In any case, there is no exact relation between the wealth of a social group and its stock of commodities; and for that reason we should not be hasty in concluding that a wealthy community or country is necessarily prosperous.

Wealth and natural resources. — Obviously, the foregoing discussion leads to the conclusion that wealth and welfare are not necessarily identical terms. Any social group that is compelled, for example, to consume great quantities of coal for heating purposes must of necessity be wealthier than a similar group more favored by nature, if the two groups are to share equally in the satisfaction of wants. A New England mechanic must necessarily be wealthier than his Florida brother if during the year the two are to have exactly the same wants supplied, for he must consume wealth in the form of fuel, warm clothing, and heat-producing foods, to enjoy exactly the same comforts which nature in warm climates furnishes freely and without limit. The same principle is involved in comparisons of the North and the South just prior to the beginning of the Civil War. The value of the northern hay crop occupies a large place in these comparisons, but scarcely ever does one find any mention of the value of the year-round grazing lands of the South. The mere fact that the North cured more than a hundred million dollars' worth of hay each year is ample evidence of the presence of wealth in that section, but it does not prove

that its welfare was increased over what it would have been had the climate permitted the stock to graze in the fields during the winter months. An abundance of natural gifts ordinarily produces prosperity and a relatively high degree of human welfare, which may or may not be accompanied by great wealth, either social or individual. Consequently, in judging the well-being of a large social group, such as a state or a section of the United States, a mere knowledge of the wealth of that section or state is not sufficient. We must first know something of the gifts of nature which it enjoys.

Wealth and its distribution. — We must also remember that a large social group, as such, may be relatively wealthy and even enjoy a high degree of total welfare and still have among its members many who suffer from a lack of the common necessaries of life. This situation we often meet in large cities, where alongside lavish displays of wealth we find multitudes of undernourished creatures dragging out a miserable existence in dirty, crowded tenement houses. On the one extreme is abundance; on the other, poverty and want. This inequality offers the hardest social problem we are called on to solve. It engages the attention of serious thinking people everywhere, for it seems to contradict the prevalent notion that progress in the industrial arts has been accompanied by an increase in the welfare of all classes of society.

EXERCISES AND PROBLEMS

A

1. Why should history be called a social science?
2. What is the essential difference between political science and law?
3. What is meant by the expression "legal ethics"?
4. Under which social science should a study of charity be made? Why?

5. What is the interest of the historian, the political scientist, the sociologist, and the economist in the following social subjects:

a. Farm tenancy?
b. Presidential elections?
c. Corruption in city politics?
d. Expansion of foreign commerce?
e. The Great War?
f. Railroad development?
g. The post office?

6. What is meant by the expression "individual viewpoint"?

7. How can the expenditure of public money for river or harbor improvements be justified?

8. Why does society bear a portion of the expense of public education?

9. How does education increase industrial efficiency?

10. Can an individual be industrially efficient and at the same time be cultured? Explain.

11. Just how, if at all, does training for industrial efficiency lessen the desire and ability of an individual to be a good citizen?

12. Define "wealth."

13. Explain the effect of prices on wealth.

14. What is the difference between wealth and welfare?

15. Why, since nature is so bounteous in the tropics, are the people of Central America relatively poor?

16. Why are the people of the Arctic regions relatively poor?

B

1. Mention three or four public improvements in your community. What interest do they hold for you as a student of:

a. History?
b. Political science (civics)?
c. Sociology?
d. Economics?

2. Do students ever have individual viewpoints which society would not sanction, as to methods of:

a. Earning money?
b. Securing academic credit?
c. Spending leisure time?
d. Using school equipment?

3. Enumerate the motives that cause young people to attend high school or college.

a. Comment on these motives.
b. Are any of them selfish?

c. Are any of them entirely unselfish?

d. Would society wholly condemn any of them?

4. Air and sunlight are free goods. Name others.

5. May a free good ever become an economic good? Give examples.

6. Name five articles that are clearly wealth; and five that are not wealth. Which of the following are wealth:

a. Salt in the ocean?
b. Weeds?
c. English sparrow?
d. Submarine?
e. Rose bush?
f. Egyptian mummy?
g. State penitentiary?
h. Burglar's tools?
i. Mississippi River?
j. Climate?

C

1. What are the characteristics of a practical man? Explain your answer to each of the following:

a. Is the wealthiest man in your community practical?

b. Do you know of any practical man that is not wealthy?

c. Is the governor of your state a practical man?

d. Is Rockefeller practical?

e. Were Presidents Washington and Lincoln practical?

2. A public speaker recently declared that the typical American city would vote to have its alleys paved with sterling silver, provided the bill was paid out of the federal treasury. Comment.

3. The opinion is generally held in the United States that society ought to provide free public education.

a. What does "free public education" mean?

b. Are free textbooks usually provided for high schools?

c. Who pays the expense of students in state normal schools and universities?

d. Why do state universities usually charge law and medical students a relatively high tuition?

e. Is free public education *free?*

4. If $1000 a year is a fair wage for a family in Florida, what would be a fair wage for an Iowa family that spends $100 a year for coal? an Eskimo family that spends $500 a year for whale oil to be used for heating purposes?

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NOTE. — The references found at the close of each chapter are confined to standard college texts in economics. For additional references, see the classified bibliography at the end of volume, pages 411–414.

CHAPTER II

NATURE AND CONTENT OF ECONOMICS

4. Nature of Economics

How to study economics. — Before taking up the study of any new subject it is desirable, in order to avoid wasting time and effort, to learn something about the best methods to be employed in mastering it. Some subjects, like botany and physics, are best approached through experiments carried on in the school laboratories. There the pupil learns through trial and observation to formulate the laws and principles underlying his science. This is known as the *inductive* method of study. The same method, as we shall see presently, may be applied to a limited extent to the study of economics. More important in our work, however, is the *deductive* method, which requires some ability to reason abstractly — that is, independent of experiment and observation. This method most people find difficult to master. For that very reason pupils and even business men often become discouraged and give up the study of economics. If, however, they would but remember that the chief aim of our science is not to discover laws, but rather to apply them to business, much of this discouragement can be removed. We do not need, for example, to concern ourselves with the proof that an increase in the amount of money in circulation tends to cause prices to rise. Instead, we start with the assumption that such is the case and try to explain the rise of prices at some particular time or place. In other words, the student of economics finds it necessary to go

from the *general* to the *particular*, while the student of a laboratory science is chiefly concerned in studying particular phenomena from which he draws general conclusions known as laws and principles.

The nature of an economic law. — Economics, like other sciences, has certain important laws which must be mastered as we progress in our study. It is desirable, then, at the outset to understand as accurately as possible the nature of an economic law. Scientific laws as a rule merely state tendencies. We learn from the study of physics that a metal rod shortens as its temperature falls. Suppose, however, that the two ends of such a rod be firmly secured. Obviously, then, a lowering of the temperature would not cause the rod to become shorter. We must not conclude, however, that the law is invalid, for it states only a tendency which would have become a reality had no opposing force been exerted on the rod. Similarly in economics, laws hold good only so long as they are not neutralized by opposing ones. For that reason it is best to qualify an economic law with the expression " tends," or " other things remaining equal." Thus, to illustrate, we should not say that the fall in price of a particular commodity will increase the demand for that commodity. Ordinarily such a statement would be correct, but not always. If at the same time the prices of all other commodities should fall as rapidly, there is no reason to believe that there would be any increase in the demand. It would be more correct, therefore, to say that as the price of a particular commodity falls, the demand *tends* to rise; or, as the price of a particular commodity falls, the demand, *other things remaining equal*, will rise.

Economics as an art. — Hitherto we have spoken of economics as a science, which it is; yet like all other sciences it has an art side, which, in the minds of many, is by far the most important. The physicist, to draw another illustration from the

physical sciences, is primarily concerned with the purely scientific aspects of his subject; but his labors would be largely in vain if he or some one else did not apply to the industrial arts the scientific laws and principles which he formulates in the laboratory. Discovery of the principle of air pressure is one thing, its application to a common cistern pump is another. One is science; the other, art. The same distinction occurs in economics. One of the best known economic laws is that the wants of any individual have varying degrees of intensity. Thus, any one of us may, at a given moment, desire a hat more than a pair of shoes, the shoes more than a fountain pen, and the pen more than a week-end excursion to some resort. There is no assurance, however, that we shall make our purchases in the order named. The hatter, the shoe merchant, the stationer, and the resort-owner, each presents his wares in the most attractive manner, usually by displays and advertising, in order to force the demand for his particular commodity or service to the fore — that is, to make the want for it more intense than it otherwise would have been. It may easily happen, then, that we shall forego the hat, the shoes, and the pen in order to be able to enjoy the week-end vacation. The law of the intensity of want, and its application to business in the form of attractive advertising, though intimately connected, are distinct aspects of the same thing. One is science, the other is art.

Material for the study of economics. — The most important field for the study of economics is not found in books, but in the business world. He who would master even the most elementary problems of economics must study the motives and actions of men as they go about the everyday tasks of making a living. To do this successfully requires a keen power of observation. The student of economics, as he progresses in his thinking on economic subjects, will observe more and more

what had formerly escaped his notice. The botanist, when he goes into the country, naturally observes the flowers and trees and other forms of plant life; the geologist watches for unique rock formations; while the student of economics speculates on the fertility of the soil, the distance to markets, the feasibility of employing labor-saving machinery, and the current wages of farm help. We can readily see, therefore, that the field from which the student of economics draws his material for study is wide and far-reaching. Furthermore, the material he finds there comprises not only physical objects such as interest both the botanist and the geologist, but also human nature of every description and even the souls of men. Consequently, judgments under such circumstances are difficult to form, and when formed they are often open to hostile criticism.

5. Divisions of Economics

Consumption. — The most fundamental notion in economics is consumption. It came first in the history of mankind, and it seems likely to continue to the end of time as the chief motive for economic activity. Desire to consume has been the strongest factor in the development of modern civilization. It is the force that has brought the human race step by step from the stone age to its present civilization. It accounts for the migration of whole nations, for the conquest of continents, for the settlement of vast agricultural areas, and for the building of populous cities. No other human desire, we may safely say, is so universal or so persistent. On it rest not only pleasure and enjoyment, education and culture, freedom and independence, but also life itself.

Consumption in its very nature is destructive, for with few exceptions we cannot consume without destroying. The food we eat is destroyed at once. We consume our clothing more gradually. Still longer does it ordinarily take to consume

an automobile, while houses often last a lifetime. In any case, consumption takes place, even though no immediate effect be discernible. Curiously enough, refraining from consuming a good does not usually preserve it intact, for *time* itself is an insatiable destroyer. Thus, two elements enter into the destruction of goods. One is the inability to consume without destroying, such as is the case with food and clothing; the other, the ravages of time, which destroy ruthlessly our food, our clothing, our home, and even the pictures on the wall.

Production. — Following consumption comes the notion of production. Primitive man soon found that nature did not supply a sufficient amount or variety of goods to satisfy his wants. Then and only then did he turn to productive labor. Gradually his wants drove him to extend his productive operations. Stone utensils and tools appeared. Later he discovered how to make bronze, which was followed by iron and steel. Long, however, after the discovery of the process of making iron and steel, production continued to be characterized by direct, hand methods. Not in fact until well after the middle of the eighteenth century did machinery play an important part in industry. Marvelous as have been the developments of productive processes, important as they are in the history of the progress of mankind, we must not forget that they have followed closely after an increased desire on the part of human beings to consume goods.

We speak in a general way of the production and consumption of goods. It would be nearer correct to speak of the production and consumption of the *utilities* embodied in goods. It is a well-known fact that man cannot create matter. We may go a step further and say that man cannot create goods. He can, however, by processes of rearrangement, create utilities, which after all are the objects of human desire. These we may call *form* utilities. He can, for example, with the assistance of nature

and natural laws, change raw cotton into cloth, thereby creating the various utilities embodied in the finished product. Each step in the process tends to destroy utilities as well as to create them. Spinning the cotton into thread destroys any utility the cotton may have had as a material for stuffing mattresses, but it creates a new utility in the form of sewing material. Likewise, the weaving of the thread into cloth destroys the utility of the thread for sewing purposes and creates a new utility which cloth alone possesses.

All the processes necessary to raise the cotton and then to turn it into cloth are productive. Yet additional processes — that is, the further creation of utilities — are usually necessary before the cloth can be consumed. No one would think of going to a cotton mill for the purpose of getting cloth for personal consumption. Rather he depends on his local merchant to get it for him. Nor does the merchant go personally to the factory for his cotton cloth. He gets it by freight or express either from the factory direct or from a wholesale dry-goods house. Thus, we see that at least two productive processes stand between the consumer who desires to utilize the cloth, and the weaver who, like the cotton farmer, has created form utilities. The railroad, or some other method of transportation, carries it to the retail merchant, thereby creating *place* utilities, while the retail merchant, in turn, by keeping the cloth until it is needed by his customers creates *time* and *possession* utilities. As our modern civilization has developed, all of these workers, and often a great many more, are usually necessary to create the total bundle of utilities embodied in finished products ready for consumption.

Not all work, however, results in the creation of utilities desired by man, or even in the creation of any utilities at all. One might exert all his strength in an effort to overturn one of the pyramids and yet produce nothing. Even if he should over-

turn it, no utilities would be created as a result. He would be much like the boy whose father made him build a rail fence and then tear it down on the plea that the work would keep him out of mischief. These are extreme illustrations, yet on every hand men labor without positive results, either because of ignorance or because of misdirected energy. We may conclude, then, that production is the creation of utilities by labor wisely and efficiently directed.

Exchange. — Soon after primitive man began to produce he found himself in possession of a surplus of goods for which he had no immediate need. Naturally he sought for a neighbor who desired to possess his goods and who in turn had goods of his own to exchange. Here was the basis for an exchange, provided each desired the other's goods and provided further that they could mutually agree as to exchange value. This method of exchange is known as *barter*, and in newer countries it persists to the present day. Barter, however, as we shall presently see, gradually gave way to buying and selling in the terms of those few commodities, like gold and silver, which practically everybody desired to possess. Then the phenomenon of price appeared. Men began to see the advantage of exchanging their surplus goods for go d or silver, which soon came to be known as money, supplying their own needs by purchases with the same money. Later banks arose to supply credit to take the place of money, which, with the paper money of the various governments, has finally come to occupy the most important place in exchange. Accordingly, under exchange, which is one of the four large groups into which economics is divided, we shall study the various functions of money; the principles underlying the science of banking, together with the banking history of the United States; domestic and foreign commerce; the tariff; and causes and effects of price fluctuation. All these subjects, we shall see when we take up the detailed study of ex-

change, are closely related aspects of the same thing — the exchange of goods.

Distribution. — As used in economics the term "distribution" means *apportioning* — that is, the division of the entire social income among those who produce it. Ordinarily, we are likely to think of distribution in the sense of transportation, of buying and selling, of marketing. Distribution, however, is *static*, not dynamic. It concerns itself with the shares that go to the different persons and groups that produce, and not with the methods or means by which these shares are handed over.

Strangely enough, distribution, the last of the four great economic notions to develop, has become the most important. A century ago, and even less, the chief economic concern of the world was to increase the output of production. Men who built factories and employed women and children to work long hours for little pay, were hailed as benefactors of mankind. Improvements in the industrial arts have changed the social viewpoint. No longer is it feared that the supply of goods is likely to be inadequate to normal demands; or that improvements and developments in productive processes will lag behind any increase in population. Rather is the fear expressed by seriously thinking people that many groups of those who assist to produce are being inadequately rewarded — that is, that they are not receiving a just share of the goods they produce. Consequently, the most important problem in economics, the one to which economists now give the greatest consideration, is concerned with the distribution of the social income.

Under the subject of distribution we shall have occasion to examine the principles governing wages, rent, interest, and profits; the cause and purposes of socialism; the place of social insurance in industry; and the share of the product that goes to the government in the form of taxation. Some of these subjects, notably socialism, might well be studied under

production, for, as we shall see, the chief demand in the socialistic program is the government ownership of the instruments of production. Yet the whole problem of social unrest, as manifested by the socialists, arises from the feeling that distribution, as it now exists, is wrong. Also, in some books on elementary economics taxation is treated as a *fifth* division of the subject. It may come, however, under distribution, for usually taxes, like rent, wages, and interest, are paid directly or indirectly from current income.

EXERCISES AND PROBLEMS

A

1. Define the word "laboratory."
2. Describe briefly a laboratory experiment.
3. What did this experiment teach?
4. Why is the laboratory method called the inductive method?
5. What is the difference between the science and the art of physics? of botany?
6. State some laws that are never more tendencies; some that may be tendencies; and some that are always tendencies.
   a. What is always the shortest distance between two points?
   b. How does pressure on a gas affect its volume?
   c. Do objects always move toward the center of the earth?
7. Why is consumption said to be fundamental?
8. What is the relation of consumption to production?
9. What is the difference between goods and utilities?
10. When does destruction create utilities? When does it not create utilities?
11. How does a locomotive engineer add utilities to a spool of thread?
12. What is the distinction between productive and unproductive labor?
13. How do modern methods of exchange differ from primitive methods?
14. State exactly the meaning of the term "distribution," as used in economics.
15. Explain the difference between the exchange and the distribution of goods.

B

1. Would you use inductive or deductive reasoning in working a problem in algebra? in building a gas engine? in starting a gas engine?
2. Cite other instances where you have used inductive reasoning; deductive reasoning.
3. Name five unproductive occupations.
   a. Why is each occupation unproductive?
   b. Were any of these occupations *ever* productive?
   c. Are any of them likely to *become* productive?
4. Why has money exchange very generally displaced barter exchange?
   a. Name any articles you have ever bartered.
   b. With what difficulties did you meet?
   c. How would money have obviated these difficulties?
5. Show how water may assume the various kinds of utilities.
6. Write three economic questions about a horse; three about a house; three about an automobile. Write about each of these three questions which are not economic.
7. Give examples of unproductive labor that is not criticized.
8. Mention some instances in which time, instead of destroying goods, increases their value.

C

1. Adam Smith held that labor to be productive must "realize itself" in some "particular subject or vendible commodity."
   a. How would Adam Smith have classified each of the following:
      i. Domestic servant?
      ii. Soldier?
      iii. Policeman?
      iv. Violinist?
      v. Lawyer?
      vi. Merchant?
      vii. Opera singer?
      viii. Public official?
   b. How would you classify each of the above occupations? Why?
   c. What changes, if any, have occurred since the time of Adam Smith regarding unproductive labor?
2. During the summer of 1918 a ruling of the War Department, concerning the employment of men of draft age, raised the question of productive and unproductive labor.
   a. Is all labor productive? Explain.

b. Is all productive labor essential?

c. Are the following productive:

i. Farmers?

ii. Preachers?

iii. Teachers?

iv. Athletic directors?

v. Professional baseball players?

d. Which, if any, of the above perform essential labor? Why?

3. You sell a $30 suit to an old-clothes man for $5. Does this indicate that your wealth has been diminished? that the wealth of society has been diminished?

4. Distribution has long since become the most important notion in economic problems.

a. Who share in distribution?

b. Which group feels most strongly that its share is inadequate? Why?

c. What is the basis of this feeling?

SUPPLEMENTARY READING

ELY, *Outlines of Economics*, 3d ed., pages 3–15.
FETTER, *Economics*, Vol. I, pages 3–10.
FISHER, *Elementary Principles of Economics*, pages 1–4.
SEAGER, *Principles of Economics*, pages 1, 2.
SELIGMAN, *Principles of Economics*, 5th ed., pages 23–35.

PART II

THE CONSUMPTION OF ECONOMIC GOODS

CHAPTER III

NATURE OF CONSUMPTION

6. Motives behind Economic Activity

Preservation of life. — Obviously, the most fundamental motive for economic activity is the preservation of human life; yet most people, we may assume, have never experienced any mental or physical pain owing to a lack of food to sustain mere existence or of clothing to keep them fairly comfortable. In other words, the typical man, though he may worry about meeting bills, and often wonder just how he is going to be able pecuniarily to do this or that, seldom, if ever, seriously considers the probability of death from starvation or exposure. If, however, he were driven to this extremity he would fight bitterly against any odds to secure the minimum of food, clothing, and shelter; for not to do so would inevitably mean death.

Desire for comforts. — Fortunately for the progress of civilization the normal individual is not satisfied with a bare existence. He desires more and a greater variety of food than will merely sustain his physica strength sufficient to permit him to go about his daily tasks. He might be able to get along and even thrive on the coarse fare of the early pioneer, yet he demands something more in the way of delicacies, fresh vegetables out of season, or ice cream. Also, in so far as physical comfort is concerned, a rough woolen shirt, a pair of overalls, heavy shoes, and a shoddy coat would suffice. But no self-respecting American would be satisfied with such an outfit comprising his whole wardrobe. Comfort in the matter of clothing

means more than protection and warmth. It means some style in the way of an extra suit for Sundays and holidays, linen collars, neckties, and other accessories. Likewise, in the matter of the home the normal individual desires more than one or two shabbily furnished rooms with none of the comforts in the way of rocking chairs, pictures, musical instruments, or attractive dishes. Obviously, he could exist, and even live to an old age, as his early ancestors did, without any of these comforts. Yet he refuses to do so, and in his refusal we find the second chief motive for his economic activity.

What has been said leads naturally to the significant question: What are comforts? The term is a relative one, much like such terms as heat, cold, and dark. What to one group or to one individual is a comfort may appear to another as a luxury or to a third as a necessity. For most people a fur-trimmed overcoat is a luxury. The well-to-do consider it a comfort, while the very rich might well look on it as a necessity. We may say, roughly speaking, that whether or not a social group or an individual considers goods needed above the bare line of subsistence to be necessities, comforts, or luxuries, depends in a large part on habit and standard of living, about which we shall have more to say later.

Desire for luxury and ostentation. — A third motive for economic activity is the desire to consume what we may unmistakably call luxuries, and by their consumption to be recognized as superior beings. Evidences of such a desire are to be found on every hand. Ultra-stylish clothing made from exclusive patterns by custom tailors, luxurious automobiles, diamonds, and fine houses bring recognition, though their display for the purpose of attracting attention may be, and usually is, vulgar. Yet the desire to get these luxuries to satisfy an unhealthy appetite for the extreme, and to display them for the purpose of gaining social distinction, drives men

to greater economic activities than they otherwise would undertake; and for that reason we, as students of economic questions, must consider them seriously, even though as individuals we may look on them with indifference or even with contempt.

The desire for luxuries and ostentation leads to many curious results. It might be thought on the first impulse that only rich people have these desires. Such, however, is not the case. Fine clothing and other forms of ostentation are often not safe criteria of the owner's financial standing. Many a rich man goes more poorly dressed than one of his lowest-salaried clerks, while his home may be less elegant than that of his private secretary. Any merchant of women's ready-to-wear garments will testify that many of his best customers for high-priced clothing are the poorly-paid clerks of the variety stores, telephone operators, and cheap office assistants. Sellers of jewelry, furniture, and men's clothing, and the managers of high-priced places of amusement, not to mention a great many others in similar lines of business, corroborate this testimony. The same desire leads also to much of the crime with which society is plagued. Now and then some one steals a loaf of bread or a cut of meat to keep himself or his family from starving, or falsifies his books to provide the simple comforts of life. More often, we may safely say, the cause of dishonesty is the desire to purchase luxuries with which to make a display. As it is with theft, so it is with most other forms of crime: the desire of the individual to enjoy luxuries and ostentation overcomes his dread of the punishment he can expect if discovered.

Desire for power. — Wealth is power. It gives its owner an influence which he otherwise would not possess. It manifests itself in politics, government, industry, education, and even in religious affairs. The owner of wealth, other things being equal, is usually preferred over his neighbor. He receives at

the hands of society a distinction which few individuals are able to forego. Most people speak in more or less awe of a Rockefeller, a Morgan, or a Vanderbilt. They also defer to the local magnate. They take pride in elevating men who have succeeded in a large way financially. Consequently, the desire for the power, which wealth brings, drives men, usually those who already have large financial holdings, to exert themselves to accumulate more wealth. Thus, we see that this desire is one of the chief motives back of economic activity.

Of the four motives which we have examined, the last, the desire for power, is by far the most questionable; and in it lie grave dangers to society. No one can seriously question the purity of the motives that drive men to conserve their lives and to get the comforts that make life worth living. Also even the most serious-minded can afford to smile indulgently on those who crave luxuries and ostentation. Society cannot, however, look with indifference on the power that can be gathered into the hands of a few through the accumulation of wealth. Not long ago a prominent New York banker contended in a meeting of economists that it mattered little to society if a few men held practically all of the wealth of the United States. The basis of his contention was that these few could not possibly consume their wealth, and, consequently, that it would eventually find its way back to the masses. Clearly, he did not understand that society was keenly interested in the power and influence which the wealth itself would place in the hands of these few men.

7. Nature of Demand

Demand is effective desire. — The word "demand" is used in our everyday speech in a variety of ways, but in economics it has a particular significance which we shall attach to it hereafter. The mere *desire* for goods does not lead to the satis-

faction of wants, though desire is the first step in that direction. Practically every one, we may safely say, desires to own an automobile; yet it is a well-known fact that only a small per cent of the people of the United States enjoy that distinction. In other words, to change slightly a well-known expression, "If desires were horses, beggars would ride." Obviously, then, the desire for a good may or may not result in the acquisition of that good. Something more is needed. The desire must be made effective; and when a desire becomes effective we call it demand. *Thus, we can define demand as effective desire.*

The question may properly be asked at this point: When does a desire become effective — that is, when does a desire become a demand? A complete answer to the question will be found a little later in the discussion of demand, for it involves the principle underlying price. We can, however, at this stage in our progress, say that the demand for a good emerges when the one who desires to possess it is willing and *able* to produce the good directly or to forego the use of some other good or goods which he may exchange for it. Suppose, for example, that a shipwrecked man, like Robinson Crusoe, desires some sort of protection against the sun, such as an umbrella. He might, as he suffered from the heat, continue to desire an umbrella without having a demand for it. Suppose again that he should conceive the idea of constructing one from materials recovered from the wreck and that he was fully aware of the labor involved. Even then there would be no demand. If, however, he actually constructs the umbrella, we may conclude that his desire has become effective — that is, it has become a demand.

Relation of demand and price. — Much more common, however, are the cases when desire becomes demand as a result of the willingness of the one having the desire to pay the current market price either in money or in other goods. Suppose a

certain individual desires to own an automobile. He has the money in the bank to pay for it, but hesitates to buy at the price named. Clearly, his desire in this case is nothing more than a desire. Certainly, it has not yet become a demand, for demand would mean a sale. Suppose, to continue the illustration, he decides to buy the automobile. Then his desire has become a demand.

We have assumed above that the demand for the automobile came as a result of an increase in the intensity of desire. It might, however, have come just as easily, or even more easily, from a lowering of the price. The principle of reducing prices to change desires into demands is significant in at least two respects. First, it is the underlying reason for price reductions on the part of retail merchants. Second, it shows that demands ordinarily increase with a fall in price. In fact, as price falls demand and desire tend to become equal. When any one says, therefore, there is little or no demand for a particular good, he means a demand at the current price. Any other assumption would be incorrect, for a proper lowering of the price would ordinarily create a demand sufficient to take the entire stock.

8. Elasticity of Demand

Nature of an elastic demand. — All demands are more or less elastic; that is, the demand for any particular good tends to increase as its price falls. In the case of some, the increase is very rapid, of others, very slow. Somewhere between these two extremes is an indeterminate boundary line separating elastic demand from inelastic demand. Elasticity of demand is, therefore, a relative term, since no demand is absolutely elastic or absolutely inelastic. Generally speaking, the demand for luxuries is elastic, for each slight decline in price tends to cause a relatively large increase in demand. Literally thousands of men were persuaded a few years ago to buy a certain make

of automobile when the price was reduced but a little more than ten per cent. Conversely, a general increase in the prices of automobiles caused by the Great War had an immediate effect in curtailing demand; though in this particular case curtailment was not as great as it would have been had there not been a

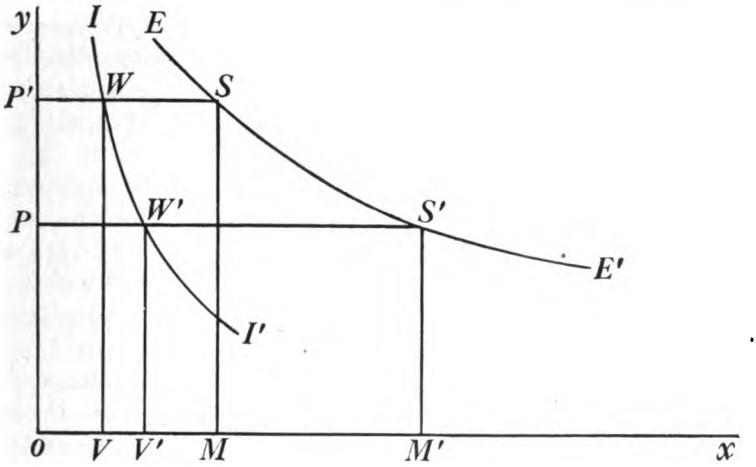

FIG. 1.

rise in the prices of practically all other goods. Curve EE′ in Fig. 1 serves to illustrate the character of an elastic demand. A fall in price from OP′ to OP (that is, from MS to M′S′) causes an increase in the demand from OM to OM′ (P′S to PS′).

Inelastic demand. — The demand for necessaries and comforts is less elastic than the demand for luxuries. A slight decrease in the prices of common table salt or matches, for example, would be unlikely to increase appreciably the demand for either of these commodities. Even a sharp decrease in price would cause few people to increase their consumption of either, simply because more salt in the food or more matches

on the shelf are not desired. Bread also has an inelastic demand, but to a less extent than salt or matches. So also have the plainer kinds of food, the more common articles of wear, and all the other goods that enter into everyday consumption. In Fig. 1, curve II′ represents an inelastic demand. It will be noticed that it is much more abrupt than the more gentle elastic curve EE′. At the price OP′ (VW) we assume that the volume of demand is OV (P′W). As the price declines the increase in demand is slight. At the new price OP (V′W′) the demand is OV′ (PW′), which is slightly more (VV′) than it was at the old price.

Elasticity of demand and price fluctuation. — On first impulse one might think that price fluctuation would be greater under an elastic than under an inelastic demand. But such is not the case. The very moment the price of a good with an elastic demand starts to fall, numerous buyers will come into the market, with the result that the fall in price is retarded and soon stopped. Likewise, an increase in price diminishes at once the demand, which in turn tends to keep the price down. In the case of goods with an inelastic demand, however, such retarding influences are much less effective. A change in the price of salt affects demand but slightly. Few new customers appear when the price declines, few quit buying when the price rises. The importance of this economic principle appears when we consider it in connection with the production of wealth. A bumper crop of wheat, for example, is likely to result in rock-bottom prices with a considerable loss to wheat-growers. On the other hand, the manufacturer of some luxury who should overestimate the demand for his product to the same degree, would suffer a less proportionate loss than the farmers, for multitudes of potential buyers are ready to buy just as soon as the price of the luxury is slightly reduced.

The close relation of price fluctuations to the two kinds

of demand, has a practical significance in business, particularly in retailing. It is a common practice of merchants in all lines to advertise cut prices, hoping thereby to increase trade in the merchandise they advertise. Obviously, any increase in trade a merchant may hope to get must either come from his competitors or arise from an increased demand for those particular goods. Whether or not the goods advertised have an elastic or an inelastic demand, the advertising merchant will profit from any trade he may get from the regular customers of his competitors, provided he sells at a profit. Also, in goods subject to an elastic demand, there is always the probability that the advertising merchant may increase his sales, not at the expense of his competitors, but by increasing demand for the goods which he advertises. In goods subject to inelastic demand the case is different. If he offers such goods at reduced prices, his customers stock up and then refrain from buying more until their stock is exhausted; and what is not less important, his competitors reduce prices on the same goods. In such cases buyers profit at the expense of the competing merchants, who are unable to recoup themselves, simply because the goods under consideration are subject to the law of inelastic demand. A jeweler, for example, can well afford to attempt to increase his trade by selling diamonds on a lower margin of profit than his competitors, for by so doing he stands a chance, not only to sell to some of the regular customers of his competitors, but also to those who otherwise would not buy diamonds; and thus in the long run, on account of increased sales, to increase his profits. The grocer, however, finds his position more difficult. By selling coffee or sugar or salt at reduced prices he can hope to increase sales only at the expense of his competitors or at the expense of his own future sales; he often does, however, sell such commodities on a close margin or even at a loss in order to induce new customers to come into his store.

EXERCISES AND PROBLEMS

A

1. Name as many motives for economic activities as you can.
2. Do these motives cause the same activities in all localities? in all groups?
3. What is the distinction between necessities and luxuries?
4. Which of the following are luxuries? which necessities?

a. Bread.
b. Bicycle.
c. Watch.
d. Diamond ring.
e. Fountain pen.
f. Automobile.
g. Face powder.
h. Kodak.
i. Newspaper.
j. Magazine.

5. Just how is wealth power?
6. What is the difference between desire and demand?
7. Which is the more fundamental?
8. When is the demand for a good said to be elastic? inelastic?
9. Why does the price of potatoes usually fluctuate more widely than the price of pineapples?

B

1. What motives for economic activity are the most noticeable among your acquaintances?
2. Make a list of your wants arising from instinct; from habit; and from social standards.
3. Name any wants not included in the above list. Why do they arise?
4. Mention eight articles of your own consumption which you consider luxuries; eight which you consider necessities.
5. How do producers in your community seek to increase the desire for goods?
6. Examine store and shop windows and try to determine whether or not the effectiveness of their display could be increased.
7. Make a list of ten articles sold by your grocer; ten by your druggist; and ten by your hardware dealer. Arrange the articles in each list according to elasticity of demand.
8. Which of these articles, if any, have changed in elasticity during the past generation?

C

1. "The true welfare of society depends on all having the necessities of life before any has luxuries."
   a. What is meant by "true" welfare?
   b. Would an equal distribution of goods necessarily supply all with necessities?
   c. After all have been supplied with necessities, which luxury should be produced first?
   d. Does a demand for luxuries ever cause an increase in goods classed as necessities?
2. Explain the purpose of such advertising as, "Dollar and a half caps now ninety-eight cents"; "These gloves are worth two dollars, now a dollar and a quarter"; "Buy now, when this supply is gone no more can be obtained."
3. A stock-raiser recently complained that the use of the automobile as a pleasure vehicle *tended* to lower the price of driving horses.
   a. Are driving horses worth more or less now than they were ten years ago?
   b. Account for other forces that may have affected the price of driving horses.
   c. Would the above statement be necessarily untrue if driving horses are worth more now than they were before pleasure cars came to be so widely used? Explain.
4. Suppose the supply of several goods be doubled, would the fall in price be the same for each? Explain.
5. "The demand for a given commodity may be elastic at one price level and inelastic at another." Illustrate and explain.
6. The claim is often made that the storage of eggs results in lower prices during the winter months than would otherwise be the case.
   a. How are summer prices affected?
   b. How is the average annual price affected?

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CHAPTER IV

LAWS OF CONSUMPTION

9. Human Wants Are Unlimited

Variation in the intensity of wants. — We have seen already that human wants can be arranged in a general way in the order of their intensity. Any individual at any moment of time has a variety of unsatisfied wants, which he proceeds to satisfy, as far as he is able, in the order of their intensity. Standing first of all are the wants for food, clothing, and shelter, though few of us are conscious of such wants, since they are satisfied rather automatically as they arise. Then come the wants of less intensity, the nature of which depends on the peculiar desires of each individual. In arranging these wants in their order we must necessarily assume that differences in the prices of the goods which will satisfy them are a factor; for it is obvious, for example, that one might have a more intense want for an automobile than for a bicycle, and yet purchase the latter.

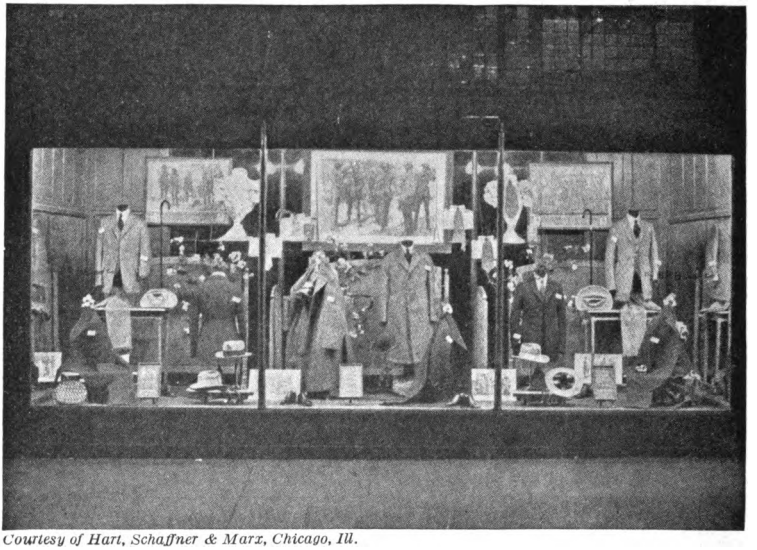
Differences in the intensity of wants account in large measure for modern advertising and modern window display. Each advertiser, as we have already noticed, expects to increase his business at the expense either of his competitors in the same line or, by creating demands for his particular goods, of sellers in other lines. The first of these expectations we may neglect at the present, for it is usually realized, if at all, by lower prices, better service, and good will. The second we will examine at this point. A retail clothier, let us say, advertises through the newspapers or by handbills and display boards the

excellence of the goods which he has for sale. At the same time he also arranges his windows and displays his stock so as to make his goods appear as attractive as possible to prospective purchasers. If every one could determine exactly just when he needed a new suit of clothing and governed himself accordingly, the only object a clothing merchant would have in advertising would be to get business away from competitors in the same line. The normal individual makes no such calculations, and except when certain dress-up days, such as Easter, approach, few men give any serious consideration to the purchase of clothing unless prompted by some outside influence. In other words, the intensity of the want for a new suit of clothing is usually low. Knowing this, the seller of clothing exerts himself through advertising and display to stimulate the demand for clothing; that is, he endeavors to increase the intensity of the want for his goods to the point where sales can be made. In causing the need for a new suit of clothing to jump, as it were, over the heads of other needs more intense, the clothier has postponed, if not destroyed, the sale of goods in some other line.

No limit to human wants. — We have seen also that there is no limit to human wants, though we must keep clearly in mind that there are limits to demands for goods. If any one of us should attempt to enumerate all the goods he wanted, it would be an endless task. Each individual has wants not only beyond what eventually become demands, but also for goods which he never hopes to possess. Many of these remote wants have little intensity; they are wants nevertheless. The child that cries for the moon or the young person that builds castles in Spain, expresses an unmistakable want, even though he does not realize the embarrassment that would come from having it gratified. The principle of the insatiability of wants has an important application to industry, particularly to production. Manufacturers and other producers need usually

have no fear that their products will not be wanted. They must remember, however, that they can profit from these wants only when they rise to the dignity of demands.

Wants and social progress. — The very fact that wants are incapable of being satisfied has led to our present state of civilization. Any individual or social group, such as a people



Courtesy of Hart, Schaffner & Marx, Chicago, Ill.

WINDOW DISPLAY OF A SPECIALTY STORE.

(Contrast with display on opposite page.)

or a nation, that has all of its wants satisfied, is in danger of decay, if indeed it has already passed beyond the stage of savagery. Many good causes have been assigned for the lack of social and industrial progress among the American Indians, the best of which is that they did not have wants sufficiently varied and intense to compel them to give up their roaming life and to make a start in permanent agriculture — in other words,

Courtesy of S. S. Kresge Co., Chicago, Ill.

WINDOW DISPLAY OF A VARIETY STORE.

(Contrast with display on opposite page.)

to go to work. The same influence partially explains the differences in the social and industrial developments among various peoples. The inhabitants of tropical and subtropical regions are notoriously unprogressive. They feel no need for permanent shelter and warm clothing, and even the getting of sufficient food is a simple matter. Granted that the warm climate dampens their enthusiasm for work, the significant fact remains that the kindness of nature in supplying their primitive wants robs them of their best energies. Very cold climates, on the other hand, compel so much labor to provide bare necessities as to leave little time for supplying higher wants. It is, therefore, in the temperate regions where we find the highest development of civilization. There nature is neither too liberal nor too exacting. There men, though they must supply their primitive wants by labor, have a sufficient surplus of time and energy left to supply their wants for higher things.

On the ground that an increase in wants produces social progress we find one of the chief justifications for much of modern advertising. There are some who contend that advertising merely results in changing the demand either from one kind of a good to another or from one good to a similar good merely of a different make and brand; in other words, that advertising is largely a social waste. Such a contention is certainly sound to a degree, but above and beyond is the influence which advertising has on stimulating individuals to greater endeavors through an increase in the intensities of their wants.

10. The Law of Diminishing Utility

Statement of the law. — Although the sum total of human wants is incapable of being satisfied, each individual experiences daily the satisfaction of particular wants, in any one of which he can observe the law of diminishing utility. This law, stated briefly, is *that as identical units of a good are consumed, the*

satisfaction derived from any unit is less than the satisfaction derived from the preceding one. By substituting the word " possessed " for the word " consumed " in the above definition the law may be made to apply to a stock of identical goods not actually in the process of consumption.

The law illustrated. — The most obvious illustrations of the law of diminishing utility are found in the consumption of food. A healthy boy with a plate of apples before him will eat the first one eagerly. The second he will consume with relish. Likewise, the third, the fourth, the fifth, and perhaps the sixth yield satisfaction. Finally, no matter how great his appetite may be, the point will be reached when he cannot eat another one. This point of satiety could be pushed ahead somewhat by substituting other kinds of fruit and especially such foods as meat, potatoes, and bread, thus offering a variety. Even then the law holds true, though its operation is not so easily seen as it was in the case where apples alone were considered. As it is with food so it is with all other consumable goods. One suit of clothing is a necessity. A second suit for Sundays and holidays is desirable. A third suit perhaps would serve a good purpose. Each yields less satisfaction than the preceding one, until finally the most fastidious dandy in the world would not care to have another. Obviously, as in the case of food, the satisfaction derived from each additional suit will diminish more rapidly if all the suits are exactly alike ; yet no matter how great the variety in color, texture, weave, or style, the law of diminishing utility holds true. Occasionally there are outstanding exceptions to the law, which, however, do not invalidate it. The first mouthful of some foods often gives less satisfaction than the second or third. Because of this fact many persons are compelled " to learn " to eat, for example, oysters or olives. Similarly, some habitual drinkers find that they like the second or third glass of liquor better than the first.

11. The Law of Marginal Utility

The law stated. — We have already established the principle that the possessor of a suit of clothing values that suit more highly than he would a second one exactly like it, and that a third would yield even less satisfaction than the second. Let us suppose, then, assuming that he has three suits exactly alike, that he attempts to determine the value to him of any one of the suits. We have seen that one suit was absolutely necessary, and that the other two were much less so. Certainly, then, being in possession of three suits, he will not say that any one of them is necessary, for he would still have two left if one were taken away. Obviously, therefore, the valuation he will place on any one of the three suits would be less than the valuation he would place on one suit if he possessed no other. Nor, by the same reasoning, will he value any two of the three suits as highly as he would if he had but two. He will, however, consider any one of the three suits as having exactly the same value to him as another suit would have if he already possessed two. We are now ready to state the law of marginal utility: *The marginal utility of a series of goods is the utility of the last unit.* This utility, we may say, is measured by the use to which the last unit can be put. If, to use an extreme example, he used the third suit to dress a manikin, then the value he would attribute to any one of the three suits would depend entirely on the satisfaction, slight as it might be, which he would derive from that particular use.

The law further illustrated. — We can understand more clearly how the law of marginal utility operates by selecting our illustrations from fanciful though striking conditions of life. Let us suppose that a lone traveler in a large forest has among other things a gun and ten cartridges. Let us suppose further that he calculates that five of the cartridges will suffice

to protect him from wild beasts and savages; that three will provide him with game, which it is not absolutely necessary to have since he has a sufficient supply of bread and salted meat to sustain him on the journey; and that two will furnish him amusement in firing at a target. We may now properly raise the question: What value does our traveler place on any one of the ten cartridges, which, we have assumed, are exactly alike in every respect? To arrive at an answer, let us suppose that before he has had a chance to use a single one of them he accidentally loses two. Since they are all exactly alike, which two has he lost? Two of the five which he expected to use in defending his life? Two of the three he expected to use in procuring fresh meat? Assuredly not. Being a sensible traveler he will forego shooting at the target. Here, then, we find the answer to our question. The value which our traveler places on any one of his ten cartridges is measured by the satisfaction he will derive from the least important use to which he has planned to put them. To push the illustration, let us suppose that the traveler loses five of the ten. What now will be his conduct? Will he shoot at a target? Will he shoot game for food? Here again the answer is, *No*. The decrease of the number of cartridges from five to four may mean the loss of his life, which certainly he values more highly than the pleasure he would get from shooting at a mark or from feasting on fresh meat. Conversely, if after losing five of the cartridges he finds a sixth, we may believe that the possession of the sixth cartridge causes his marginal utility for cartridges to fall, since now he can and will use one of them to gratify a want which he was unwilling to gratify when he had but five.

To illustrate the same law in another way, let us suppose that a shipwrecked sailor finds himself adrift in a rowboat with his dog and two biscuits. Let us also assume that the sailor values his own life more highly than he does that of the

dog, and that he knows that one biscuit for him and one for the dog will sustain the life of both until they are picked up. With these notions clearly fixed in mind, the sailor loses one of the biscuits in the water. Which biscuit did he lose, his biscuit or the dog's biscuit? Supposing, as we have, that he values his life more highly than he does that of the dog, and that he will need to consume an entire biscuit to sustain life until picked up, our answer must be that it was the dog's biscuit which fell overboard.

Applications of the law. — The law of marginal utility, though we may not be conscious of the fact, is closely related to many of our everyday acts and to many of our comparisons of values. Usually, for example, when we purchase a pair of shoes, we could, if we cared to do so, purchase a second pair exactly like the first. Our reason for not purchasing the additional pair is that the use to which we could put any one of the two pairs will yield less satisfaction than we can get from the same amount of money spent for some other good, say a hat. We will, however, purchase the second pair if the merchant reduces the price sufficiently to meet the satisfaction which we estimate a second pair of shoes would give us. Practically all of the buying in quantities of consumable goods is governed more or less by this law.

In making comparisons of the values of certain goods we often fail to arrive at correct conclusions because we ignore the law of marginal utility. Suppose the question were asked: Which is the more valuable, gold or iron? diamonds or bread? perfume or water? Obviously, bread and water are necessary to sustain life, while modern civilization is built on iron. Yet water is usually free for the taking, while bread and iron are among the cheapest of staple goods. To clear the way for a correct answer we must first contrast the marginal utility of a good with its *total* utility. The marginal utility of gold is much

greater than the marginal utility of iron; that is, the loss of a unit of gold would be more keenly felt than the loss of a similar unit of iron. The total utility of iron, however, is much greater than the total utility of gold. Perhaps the matter will be clearer if instead of gold and iron we consider perfume and water. We use water in a great variety of ways, some of which yield satisfactions of a very low degree. On the other hand, the poorest use to which we put perfume is likely to yield a relatively high satisfaction. For this reason the marginal utility of perfume is greater than the marginal utility of water. We must, however, keep clearly in mind the fact that the total utility of water is greater than the total utility of perfume, for without the former we would find it impossible to sustain life itself. While the latter we could forego entirely with no serious effect other than a comparatively few people being inconvenienced.

The relation of marginal utility of water to its total utility is shown graphically in Fig. 2. The incompleted rectangle A, which we will leave open at the top since few if any would be willing to set a value on their own lives, represents the greatest satisfaction an individual can get from the consumption of water. Rectangle B represents the satisfaction derived when a second unit of water is put to a less important use, say in cooking, while rectangles C to M represent decreasing satisfactions resulting from decreasingly important uses. Since water is practically a free good we can assume that the height of M is zero. In this case the marginal utility of water would be zero while its total utility would be infinitely great.

We may now properly consider the relation between the marginal utility and the total utility of a good which is neither necessary to sustain life nor free for the using. A good example is dining-room chairs. Obviously, as was the case in the earliest frontier homes, any American family could do entirely without

the use of chairs in the dining-room. We will assume, however, that common decency demands two chairs, each yielding exactly the same satisfaction, represented in Fig. 3 by rectangles A and

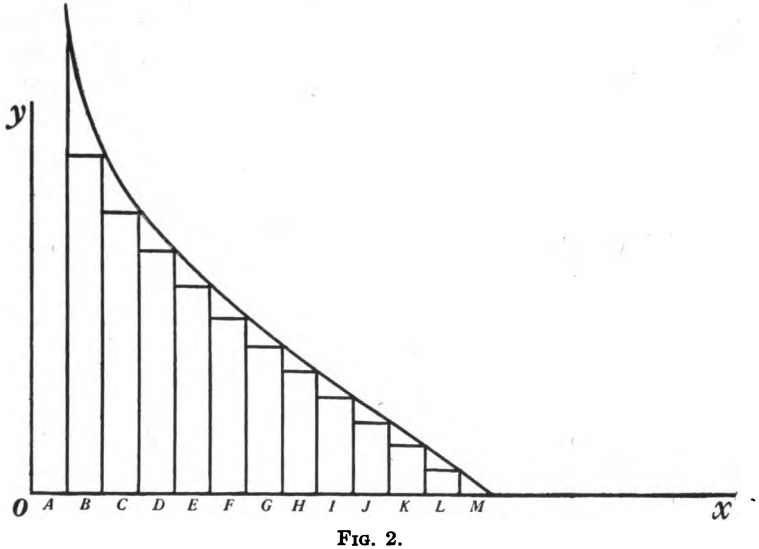


FIG. 2.

B. A third chair (C) may also be desired, though it would yield less satisfaction than the first or second. Even a fourth (D), fifth (E), and sixth (F) can be used occasionally to advantage.

The marginal utility of the six chairs is represented by the rectangle F. The total utility of the six is found *not* by multiplying the rectangle F by six, but by adding all the rectangles.

Consumers' surplus. — The rectangle F in Fig. 3 represents not only the marginal utility of the six chairs, but also the price paid for each of the six. The total price, therefore, of the six is represented by the rectangle PO. Clearly, then, the

purchaser of the six chairs enjoys a greater satisfaction from five of them than he would have enjoyed had he spent his money for other goods, for we may assume that the utility yielded by the sixth chair is measured by the price of each of the six chairs. This excess satisfaction is known as consumers' surplus. In the case of each chair it is the difference between the price paid, represented by the margin, and the price that would have been paid rather than to forego its use.

The principle of the consumers' surplus is the basis of all trade and exchange. In the middle ages the opinion prevailed that only one party to a trade could be benefited. This opinion

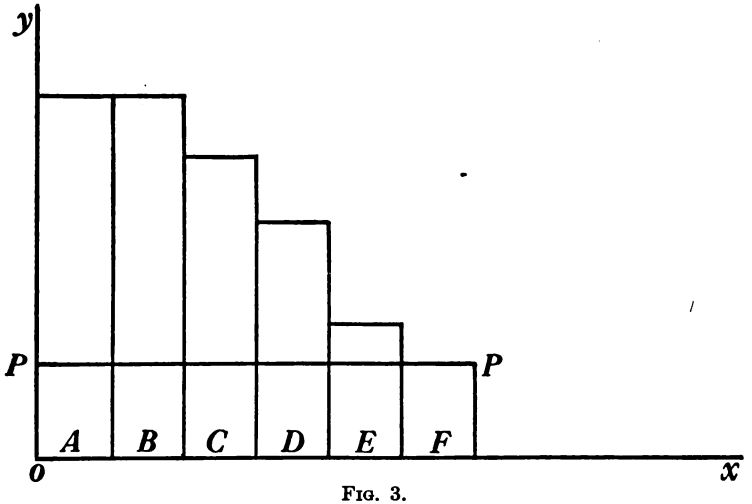


FIG. 3.

we now hold to be erroneous. In practically all of our purchases and exchanges, even though we desire but a single unit of any good, we enjoy a consumers' surplus. If such were not the case few exchanges would take place, since each one would prefer his own goods to the goods of another.

EXERCISES AND PROBLEMS

A

1. What evidence is there that the sum total of human wants cannot be satisfied?
2. Why does a clothier often advertise without mentioning prices?
3. How does variety affect consumption?
4. Does the law of diminishing utility apply to the possession of money?
5. If the supply of goods be increased, how would the value of each unit be affected? the value of the total stock? Explain.
6. Why is money usually said to have a "reflected" marginal utility?
7. Explain the conditions under which a *large* consumers' surplus would exist; a *small* consumers' surplus.
8. Why is it more difficult to measure the consumers' surplus of water than of oranges?

B

1. Compare the window display of a ten-cent store with the window display of a dealer in ladies' ready-to-wear garments in the following respects:
   a. Variety of goods displayed.
   b. Price tags.
   c. Attractiveness.
   d. Effect on intensity of wants.
2. Name 25 nationally advertised goods. Why does a monopolist advertise his products?
3. Make a list of ten of your personal wants in the order of their intensity. Would this order be changed if each were multiplied by five?
4. Make a list of the articles you would buy if you had $100. How would this list be affected if, instead of $100, you had $200?
   a. Would the number of items be increased?
   b. Would the first list contain items not included in the second list?
   c. Would the second list contain the same amount of any item or items included in the first list?
   d. Is it likely that the second list will contain but one item?

5. Call to mind some recent purchases you have made. In which did each of the following have an influence:

a. Law of diminishing utility?

b. Law of marginal utility?

c. Consumers' surplus?

6. Estimate the amount of consumers' surplus in the purchase of a lead pencil, a pair of shoes, a dish of ice cream, a loaf of bread, a suit of clothing.

C

1. Many people condemn window displays and advertising as an economic waste. Discuss from the standpoint of:

a. Social progress.

b. Service to the consumer.

c. Good will in merchandising.

2. A prominent lawyer recently told the story of how his greatest, unattained ambition when a boy had been to own a shotgun. Now he has wealth enough to buy hundreds of such guns, but has not one.

a. Account for his change in desires.

b. Did he have a demand for a gun when he was a boy?

c. Has he *now* a demand for a gun?

3. "A clothier, when he goes into the market to buy goods, usually has some adequate notion of the marginal utilities *of his customers.*"

a. Why do some clothiers handle only expensive clothing?

b. Why do others handle cheaper grades?

c. Why do some handle both expensive and cheap grades?

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CHAPTER V

DEMAND, SUPPLY, AND PRICE

12. Relation of Demand and Supply to Price

Nature of demand and supply. — No two terms employed in the language of economics are better known and oftener misused than demand and supply. One of the most severe critics of our subject once said that a parrot could be made an economist by merely teaching him to answer "demand and supply" to every question put to him. This statement was extreme and meant to ridicule. Yet it has a sound foundation, for relatively few people have ever seriously attempted to analyze the nature of these terms. We have already seen that demand is effective desire; also that an individual has a demand only when he is willing and able to satisfy it by foregoing the use of other goods — that is, to pay the current price. Desires, therefore, are constantly becoming demands. In the light of this knowledge we can, by recasting slightly the meaning of the word *demand*, say that there are *active* demands (demands in the strict sense of the word) and *potential* demands (desires or wants).

Likewise, supply may mean one of three things. First, it may mean the supply of goods offered at the current price — that is, the supply which owners are willing to furnish on the instant at the market price. Second, supply may mean, in addition to the amount supplied, goods that would be offered at higher prices. Third, it may mean goods not yet produced, owing either to a lack of time or to an unsatisfactory market

price. When we speak, therefore, of demand and supply we ought to have clearly in mind the exact nature of each. Otherwise, we are almost sure to create confusion, and to acquire habits of loose thinking.

It is apparent no doubt that neither demand nor supply works independently of the other; that there is a close mutual relationship. Any increase in demand, other things remaining equal, produces a change in supply; and conversely, any change in supply produces a change in demand. Professor Marshall has likened them to the two blades of a pair of shears, both of which are necessary if any cutting is to be done. It is also apparent from this analogy that supply and demand naturally tend to approach each other. Increase in demand tends to raise price, and, consequently, causes an increase in supply. An increase in supply, on the other hand, tends to lower price, thus increasing the demand.

Effect of demand and supply on price. — From what has just been said we may conclude that the price of any good is determined by the demand for, and the supply of, that particular good. Generally speaking, such is the case; but a few modifications in the statement will lead to a more definite understanding. Demand is used here as nothing more or less than the willingness and the ability of those who desire to possess the good, to pay the market price. Supply, as we have just seen, may mean one of several things. In this case it means the quantity of the particular good offered for sale, and does not include, as many think, the whole amount of such good in existence. In other words, the price is set *not* by desires for any good on the one hand, and the total supply of that good on the other; but by demand (effective desire) and the volume freely offered to fill this demand.

The effect of price on demand and supply. — Usually when the statement is made that price is determined by demand

and supply, the one making the statement does not realize the full significance of the *effect of prices on demand and supply.* Let us assume, as is always the case, a given market price for some particular good on a given day. Producers who are selling their goods advantageously, and they are likely to predominate, will exert themselves to increase the supply. An increased supply at the old price will not be taken. Consequently, sellers will reduce prices, thereby increasing demand. Enough has been said to enable us to make several additional general statements of principles that underlie the relation of the three notions — demand, supply, and price. (1) *Demand and supply mutually affect each other through price.* (2) *Price is the immediate factor in the determination of the volume of demand or supply.*

13. Determination of Market Price

Maximum and minimum prices. — When buyers and sellers come into a market, each buyer has in mind the maximum price he will pay for a good, while each seller, on his part, has determined on a minimum price. Provided nothing occurs to change these determinations, no exchange will take place unless the maximum price of the buyer is equal to, or greater than, the minimum price of the seller. Here, then, is the most fundamental notion in the determination of market price.

In determining a maximum price the buyer estimates the marginal utility of the good he desires, measuring it by comparing the satisfaction which this good will yield with the satisfaction yielded by some other good or goods of the same price. If he desire more than one unit of the good, the marginal utility will ordinarily be lower than if he desired but one unit. The seller's problem of determining a minimum price is a much simpler matter. Whereas the buyer's determination is largely an estimate, often, as we have seen, wholly disproportionate to

his wealth, the seller's determination is, except under extraordinary circumstances, fixed for him by the expense he has incurred in procuring the good. The prospective buyer of a suit of clothing, for example, can, at the best, have but a hazy notion of the maximum price he will pay for a particular suit. The merchant, on the other hand, knows almost exactly the minimum price he can accept for it without suffering a loss.

Buyers' and sellers' surplus. — Assuming that the buyer's maximum price exceeds the seller's minimum price, we may conclude that an exchange will take place at some point between these extremes. If the exchange is for one unit of goods at or near the buyer's maximum price, it is readily seen that he will enjoy little or no consumers' surplus. If, however, the exchange is at or near the maximum price set by the buyer for each of several units he will, as we have seen, enjoy a consumers' surplus. The seller also enjoys a sellers' surplus, which we may define as the difference between his minimum price and the market price. Since market price is usually somewhere between the buyers' maximum and the sellers' minimum, each group enjoys a surplus, the size of which in a barter régime would be largely determined by the higgling ability of the parties to the trade.

Four possible market conditions. — A market price may result from any one of four conditions: (1) One buyer and one seller, (2) one buyer and several sellers, (3) several buyers and one seller, and (4) several buyers and several sellers.

The first of these, one buyer and one seller, is now of no great importance, though it characterized trade at an earlier day, when men lived far apart and exchanged goods with little reference to community demands. Occasionally even now exchanges are made in which there are but one buyer and one seller: the owner of a family heirloom, a stranger let us say, offers to sell the heirloom to the only remaining member of the

family. The determination of price in this case bears two characteristics not usually met. First, both the buyers' surplus and the sellers' surplus are likely to be exceptionally large. Second, the good exchanged is incapable of reproduction.

Almost as rare under free competition are the cases where there are one buyer and several sellers. Frequently, however, some buying monopolist controls the market. While, as we shall see presently, he is restrained from pretending to have a ridiculously low maximum price, he can, and often does, as in the case of crude oil, iron ore, and leaf tobacco, enjoy an excessive buyers' surplus. Fortunately for the sellers, law and popular feeling frown on buyers' monopolies.

Monopolistic also is the third condition, where there are several buyers and one seller, though usually, as under the second condition, the monopoly is not complete. Any one of the so-called trusts we may consider the single seller; the public, the several buyers. The Standard Oil Company, for example, while its monopoly is not complete, represents the single seller, while the users of gasoline, to name only one group of its customers, comprise the buyers.

The fourth, and by far the most important condition under which a market price is established, is when there are several buyers and several sellers. Here we find each buyer with his own notion of a maximum price, and each seller knowing rather definitely his minimum price, which, as we have seen, is determined by his expenses of production. Here too, we must assume competition to be free and active, and each buyer and seller to be desirous to drive the best bargain possible. With these assumptions in mind we can now turn our attention to the determination of market price under competitive conditions.

14. The Competitive Market Price

Buyers' schedule. — To simplify matters, let us suppose that seven men, each desiring to purchase *one* bicycle, attend a bicycle auction where the goods offered for sale are alike in every respect, and where both buyers and sellers are permitted freely

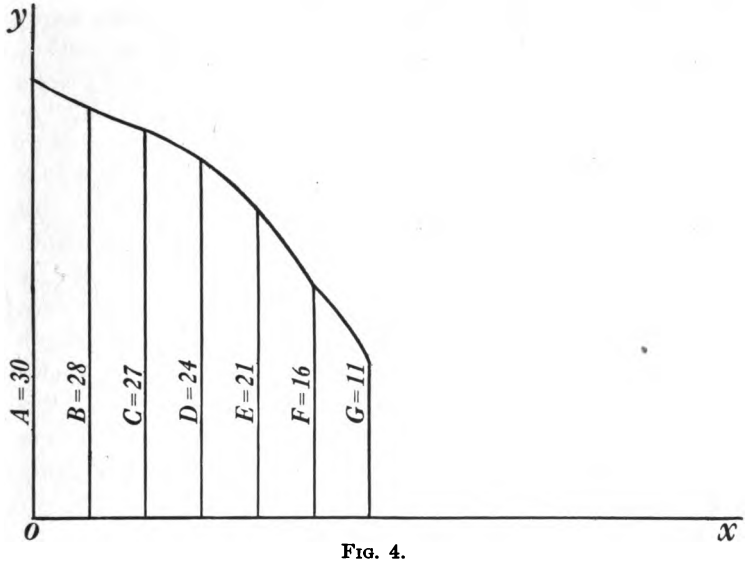


Fig. 4.

to make offers. These seven buyers we will indicate by the letters A, B, C, D, E, F, G. To complete our supposition let us attach to each of the seven buyers the following maximum prices: A — 30, B — 28, C — 27, D — 24, E — 21, F — 16, G — 11. Clearly, the valuations differ widely, but that is exactly the situation under actual business conditions; for the valuations we have attached to these seven buyers represent desires which may or may not become demands; *and we can know whether or not they become demands only when we*

know the exact location of the market price. If, for example, the market price should be fixed at 25, D, E, F, and G would not have a demand for bicycles, for demand implies both the willingness and the *ability* to pay the market price. Obviously, then, we must next turn our attention to the sellers, who are equally as necessary as the buyers in fixing a market price.

Sellers' schedule. — Each seller, as we have seen, has in mind a minimum price under which he cannot go without sustaining a loss. Accordingly, each of the sellers of bicycles — *seven*, let us say, with one bicycle each — who attends our assumed bicycle auction has settled on the lowest price he will take for his bicycle. As in the case of the buyers we can represent the sellers by letters, as R, S, T, U, V, W, Z. Also we can attach minimum prices to each of them as follows: R — 17, S — 18, T — 20, U — 23, V — 28, W — 31, Z — 40. In the preceding section it was noted that we could not determine the number of bicycles demanded until the market price was fixed. A similar difficulty exists in the determination of the available supply, since, according to our assumption, those sellers whose minimum price exceeds the market price will withdraw their bicycles from the auction. Fig. 4 illustrates graphically the character of the various demands; Fig. 5 of the various supplies.

Fixing the market price. — Before proceeding to determine just where the price would be fixed, it will simplify matters to eliminate those buyers and sellers who clearly have no chance to participate in the auction — that is, those buyers who cannot possibly have a demand and those sellers with minimum prices above the maximum price of the highest bidder among the buyers. Buyer G, whose maximum price is 11, cannot have a demand, for the lowest minimum price among the sellers is 17. For the same reason, F must withdraw from the auction. Similarly, sellers W and Z must withdraw, for the minimum

price of either exceeds the maximum price of any one of the buyers. There remain, then, five buyers and five sellers, who, so far as we have determined up to this point, will assist to fix the market price. We are now ready for the auction to open.

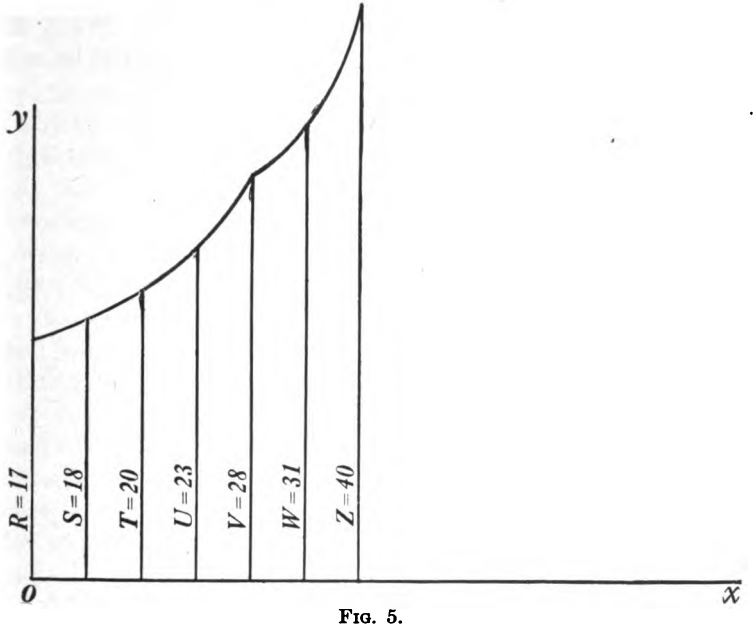


FIG. 5.

Buyer A announces, let us say, that he will pay 30 for one bicycle. Immediately five sellers each offer him a bicycle at that price. Seeing that he may be able to get a better bargain by holding off, A refuses to buy. The sellers then begin to reduce their prices. When they drop to 28 a second buyer (B) comes into the market. We then have five sellers and two buyers. Prices will continue to fall. When they pass below 28, V will drop out, leaving two buyers and four sellers. At 27

a third buyer's desire becomes a demand. Then we have four sellers and three buyers. Clearly, no one of the four sellers would permit the downward movement of the price to stop at this point if it resulted in his making no sale, and that is exactly what would happen. One bicycle would remain unsold. At 26 the same condition remains; so also at 25. When 24 is reached, however, a fourth buyer (D) cries out that he will

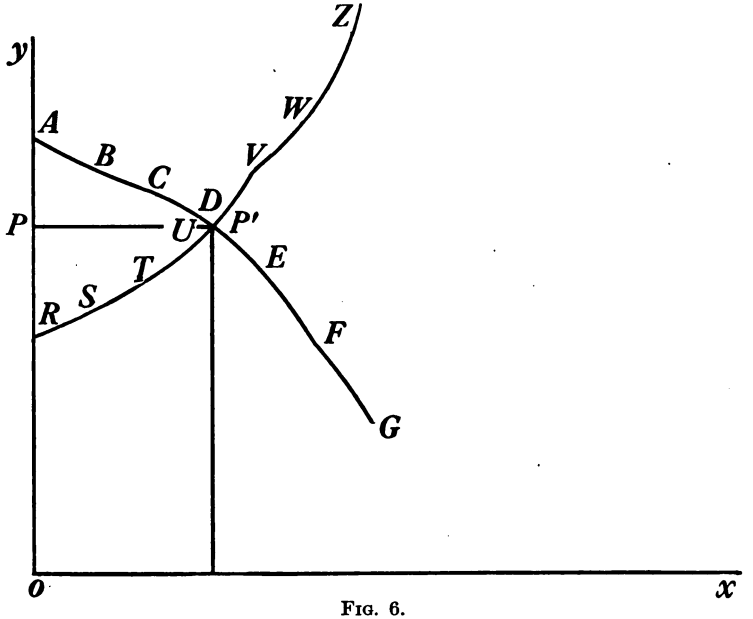


FIG. 6.

take a bicycle at that price. Now we are near the market price, which is likely to be found anywhere between 24 and 23, the exact point being determined largely by the ability of either group to bargain successfully. With the market price established between these two limits, 23 and 24, we find that three

of the seven buyers do not have a demand for bicycles, and that three of the seven sellers are unwilling to furnish any of the supply at that price. We find also that the *market price is that which produces the greatest number of sales.*

To make the matter clearer let us bring Figs. 4 and 5 together in Fig. 6. Here we see that buyers A, B, C, and possibly D, have a buyers' surplus. A's surplus is represented by the vertical distance from A on the demand curve to the horizontal line marked PP'. Similarly, the surpluses of B, C, and D may be determined. To express the same thing mathematically, we say that the surplus of each buyer is the difference between his maximum price and the market price. Likewise, the surplus of any one of the sellers is the difference between his minimum price and the market price.

In the above assumptions the simplest condition possible has been chosen, though the conclusion reached holds true for the most complex condition in fixing market price. It is conceivable, first of all, that any one of the buyers might have had a desire for more than one bicycle. If, for example, A had been willing not only to pay 30 for one but also to pay 29 for each of two, the market price would have been fixed between 23 and 27 instead of between 23 and 24. Second, the three sellers who found the market price below their minimum prices might, in a moment of panic, have thrown their bicycles on the market at a sacrifice rather than to hold them. In this case the market price would have been fixed still lower. Third, under actual business conditions it is improbable that the bicycles would have been exactly alike. Such complexities, however, merely complicate the fixing of market prices under free competition, and do not, as one might think at first glance, run contrary to the principle we have worked out under simpler conditions.

EXERCISES AND PROBLEMS

A

1. What is meant by the expression "supply and price"?
2. How is price affected by demand? by supply?
3. How does price affect demand? supply?
4. Why do sellers have minimum prices?
5. How does each determine his minimum price?
6. Why do buyers have maximum prices?
7. How does each determine his maximum price?
8. What are some of the different meanings of "market"?
9. Does the supply of a commodity include what is in the hands of the consumer?
10. Which buyers in a market cannot buy?
11. Which sellers cannot sell?
12. Why do many summer tourists like to go where no other tourists have gone?

B

1. Make a list of goods that advanced in price during the Great War and try to determine how these advances affected production.
2. Attach maximum prices to five articles you have recently purchased.
   a. Compare these prices with the prices you paid.
   b. Determine your approximate consumers' surplus on each purchase.
   c. Would a lower price have caused you to buy more of any article than you did buy?
   d. Did you feel the influence of other buyers?
3. Give examples from your own experience or observation of the four possible market conditions.
4. Mention the names of any articles you have seen sold at "cut prices." Discuss these sales under the following heads:
   a. Elasticity of demand.
   b. Competition among sellers.
   c. Competition among buyers.
   d. Seasonableness.
5. How has your refusal to buy any article which was on sale affected the market price of that article?

C

1. During the winter of 1918–19, the statement was often made that the high wages per ton paid to miners during the preceding summer had tended to decrease rather than to increase the production of coal.
   a. Assuming this statement to be correct:
      i. Why were wages increased?
      ii. Why did not an increase in wages increase the coal output?
      iii. Can we conclude that wages vary inversely with output?
   b. Assuming this statement to be incorrect:
      i. What caused it to be made?
      ii. Why did many people believe it to be true?
      iii. Why was it not refuted?
2. Analyze the medieval notion that in every exchange of goods one of the parties to the exchange lost exactly what the other party gained.
3. Explain how the market price of wheat would be determined under the following conditions:

Amount Offered	Price	Amount Demanded
10,000,000 bu.	$1.50	3,000,000 bu.
8,000,000 bu.	1.25	4,000,000 bu.
7,000,000 bu.	1.10	5,000,000 bu.
6,000,000 bu.	1.00	6,000,000 bu.
3,000,000 bu.	.80	8,000,000 bu.
1,000,000 bu.	.60	10,000,000 bu.

   a. At what price will the greatest amount be bought and sold?
   b. What effect will the market price have on consumption of wheat? on future production of wheat?
4. If competitive prices are determined by an equilibrium between demand and supply, how can a store maintain a "one-price system"?
5. "The price of pork has never gone as high as $2 a pound nor as low as ten cents a barrel."
   a. Why are there *any* fluctuations in price?
   b. Why are the prices higher now (1919) than ten years before?
   c. Are there any conditions under which the price of pork might fluctuate as much as suggested by the above statement?
   d. What classes of people would buy pork if it were $2 a pound? What would other classes do?

6. Suppose at potato-digging time a gardener finds that the market price of potatoes is but twenty cents a bushel.

a. What would be his attitude toward storing potatoes?

b. If he stored his potatoes would he be a seller in the market? Explain.

c. Suppose he had no facilities for storing:

i. Would he dig his potatoes? Why, or why not?

ii. Might he sell them undug? How?

d. What would be his attitude toward the next crop of potatoes?

e. Suppose he turns his attention to wheat-raising:

i. What would be the possible effect on the future price of potatoes?

ii. How might the price of wheat be affected?

SUPPLEMENTARY READING

BULLOCK, *Introduction to the Study of Economics*, 3d ed., pages 192–222.
ELY, *Outlines of Economics*, 3d ed., pages 164–182.
FETTER, *Economics*, Vol. I, pages 61–72.
FISHER, *Elementary Principles of Economics*, pages 268–353.
JOHNSON, *Introduction to Economics*, pages 36–42.
SEAGER, *Principles of Economics*, pages 109–122.
SELIGMAN, *Principles of Economics*, 5th ed., pages 222–238.
TAUSSIG, *Principles of Economics*, 2d ed., Vol. I, pages 138–158.

CHAPTER VI

SOME PRACTICAL ASPECTS OF CONSUMPTION

15. Harmful Consumption

Consumption from the standpoint of economics. — Strictly speaking, the student of economics, as such, must confine his attention to demands for goods, however much as an individual he may deplore the manner in which many goods are produced and the evil results which their consumption often entails. A suit of clothing made in a sweatshop fills the same need as a similar one turned out from the most up-to-date manufacturing plant. Both are produced, both are distributed in the form of money among those who assist in production, both are consumed. Likewise, a box of cigars is just as much an object of economic inquiry as is a sack of flour, though society would be greatly profited by an increase in the one and a decrease in the other. But just as long as there is a demand for cigars, the student of economic questions must include them in his investigation. This does not mean, however, that we should ignore the effects of the production or consumption of any particular good. Rather does it mean that we should study every economic demand irrespective of its evil results and every effort that is put forth to supply this demand.

Nature of harmful consumption. — It is impossible, we may as well say at the outset, to draw a line through consumption, marking off, on the one side, the satisfactions of desires that bring nothing but an increased welfare both individual and social, and on the other, the satisfactions that produce the

opposite effect. Every one will agree that bread contributes to our well-being, and that opium does not. Yet in a complete classification of goods there comes a time when disagreement will appear, when even learned and unbiased authorities will differ. The best we can do under these circumstances, therefore, is to weigh the facts in each case, both as individuals and in small social groups, hoping thereby to arrive at the truth.

It is obvious that a considerable portion of human consumption is unwise and even actually harmful. Intemperance abounds not alone in the consumption of such positively harmful goods as drugs and intoxicating liquors. Its baneful influence extends even to the use of food, of clothing, and of entertainment. Few people would now deny that the use of drugs or intoxicating liquors is detrimental, as well to the best interests of society as to the individual. The opinion once generally held that alcohol increased and sustained mental and physical energy has been discarded. Unfortunately, the great majority stop at that point in their opposition to intemperance, forgetting that it is also harmful to consume intemperately other economic goods. The typical American is much more likely to be overfed than underfed. The more frugal Europeans often marvel at our capacity for food, while many a physician can testify that his practice consists largely in doctoring the ailments that arise from overeating. Such consumption, we may safely say, is harmful as well as unwise. Also in the matter of dress many of us, perhaps a majority, protect our bodies with more care than nature demands, thereby lowering the physical vitality, instead of raising it. Entertainment, too, may be carried to an extreme, particularly that kind which consists of late hours, undue excitement, or inactivity.

Consumption and efficiency. — It will readily be seen that consumption is an important factor in efficiency. Large industries clearly recognize this fact; hence their insistence on sobriety

among their employees. The manager of many a large industrial plant views the week-end with horror, knowing from experience that his force will be depleted on Monday by Sunday's carousals. The effects of these excesses are too obvious to merit discussion. Other excesses, however, not so easily discerned, or if discerned allowed to go unchallenged, have a similar influence on the industrial efficiency of society. Office workers, students, and all others that follow a sedentary life, often fail to work as efficiently as they might if they took more exercise and ate less food. Who has not experienced the languor that comes so frequently just after the noonday meal? the fine feeling of bodily and mental energy that comes with an empty stomach? Efficiency is increased also by keeping the temperature of the body normal. Overheated rooms, which means an overconsumption of fuel, and garments too thick and heavy for the occasion, produce depression in mind and body, thereby lessening normal efficiency.

From what has been said, it is apparent that society is interested in the consumption of its members — that is, that it is not altogether an individual matter what one eats, or drinks, or wears. Already steps have been taken to discourage the use of intoxicating liquors, not alone because it is felt that their use is more or less immoral, but also because it has been proved beyond dispute that alcohol and industrial efficiency do not mix. Further than this, society has not yet attempted to go. Consequently it is the business of each one of us to keep fit mentally and physically by relieving the mind and body of overwork in combating intemperance of every sort.

16. Unwise Consumption

The meaning of economical consumption. — Another type of consumption, which in itself is not positively harmful to the body or mind, we may designate as unwise consumption.

Whenever either of two goods is capable of satisfying a want, obviously, the use of the one which involves the greater labor to procure is unwise. The early colonists, and later the frontiersmen in the West, found it necessary to substitute corn for wheat as a material for making bread. They preferred wheat bread, but their good sense soon taught them the advantages of eating corn bread instead. Here is an example of economical consumption. It was economical for the simple reason that corn was easier to grow than wheat. Some of the early settlers, however, went to great extremes in an effort to satisfy tastes which they had acquired in Europe, and which could be satisfied only in old settled countries. They planted vineyards, from which they expected to get, in a short time, a supply of wine sufficient for their needs. Almost without exception their expectations were not realized. Consequently, they turned to apple cider and corn whisky, both of which were easily produced on the frontier. Modern business conditions tend to lessen the differences in value between two goods equally serviceable, yet even today there is need to compare the disadvantages arising from the higher price of one good with the disadvantages one may feel in having to adjust his taste to another good more easily procured.

The gospel of plain living. — Closely related to economical consumption is plain living. At the very outset we must rob our minds of any feeling that plain living is something mean or contemptible, or that it is associated with poverty or want. On the contrary, plain living is the real basis of industrial efficiency, of education, of culture, and of happiness. It begets contentment of mind, adds to physical energy, and prolongs life. We find it associated with achievement in every line of endeavor. In fact, an old philosophy made plain living and high thinking the only sure corner stones on which a successful life could be built.

The most superficial observation of American living conditions reveals, not only a remarkable degree of poor taste in consumption, but also poor judgment as to the relative merits of similar goods. Otherwise there would not be the widespread demand for the study of home economics. Everywhere serious-minded men and women are coming to realize that incomes are not being spent to the best advantage, that they are virtually being thrown away, too often through ignorance, in buying goods that satisfy the most transitory demands.

Social unrest. — Unwise consumption is one of the several causes of the social unrest which has manifested itself in this country during the past generation. The consuming standards of most individuals are set to some degree by neighbors and friends. In a democracy, such as ours, where every one feels that he is equal to every one else, there is always the temptation to *display equality through the consumption of goods.* Consequently, many people live beyond their income in a fruitless endeavor, as they say, to keep up appearances. The result is debt, worry, and discontentment. Debt keeps out of their reach business opportunities which they might easily have grasped had they lived within their means. Worry destroys efficiency, while discontentment causes them to overlook the small things which would in time lead to something better. Here, then, is an important source of social unrest, which we can counteract and finally eliminate by having a proper regard for economic values.

It would be misleading to close this discussion without saying something more about the sources of social unrest. The rapid increase in the number of wealthy men, the display of lavish expenditures on every hand, and the concentration of industry, lead many to believe that American industrial society needs to be reconstructed in some way so as to equalize more evenly the distribution of wealth and to place in the hands

of the workers greater control over production. Further discussion along these lines, however, must be deferred to later chapters.

17. Conservation and Thrift

The sin of waste. — Americans are proverbially the greatest wasters the world ever saw. It is a common expression among European travelers in this country that a frugal French housewife could easily feed her family with the food wasted in a well-to-do American home. Granting the extravagances of such a statement, the significant fact remains that only a relatively few of us are normally thrifty. Not only in food, which may be wasted by overeating as well as by throwing it in the garbage barrel, but also in clothing, in house furnishings, and in a variety of different ways, we fail to get maximum satisfaction from our consumption. The broken pieces of bread, left-over vegetables, and bits of meat, which are too often thrown away, might very well, if sensibly and properly prepared, serve as the basis of another meal. Likewise, the overcoat, discarded after a season's wear, or the shoes thrown away simply because they need a new pair of soles, represent waste which might otherwise be utilized to the advantage of society as well as of the individual.

Any discussion of waste must necessarily involve two conflicting viewpoints: that of society, which suffers a loss; and that of those individuals who reap a profit from waste. Clearly, the cattle-raiser, as such, is profited by the waste of meat. The manufacturers and retailers of men's clothing likewise profit by a waste of hats, overcoats, and furnishings. Not one of these men perhaps would openly encourage waste of any sort, and it is only fair to them to say that they see no waste when the goods they themselves sell are concerned. Society, however, must view the whole field and not a particular industry,

though this view should be detrimental to individual enterprises. The country as a whole experienced during the first year of our war with the Central Powers this conflict between individual and social aims in the matter of waste. The government called for millions of men and billions of dollars which could be supplied only from the non-war industries. The answer was "business as usual," which from the social point of view was impossible. Individual business men set up claims that the ends of war could be furthered by buying *their* goods. Finally, such claims became absurd. Even florists in some sections adopted the slogan, "give flowers and win the war," while theatrical managers everywhere insisted that the morale of the people demanded an increased attendance at vaudeville and motion-picture shows.

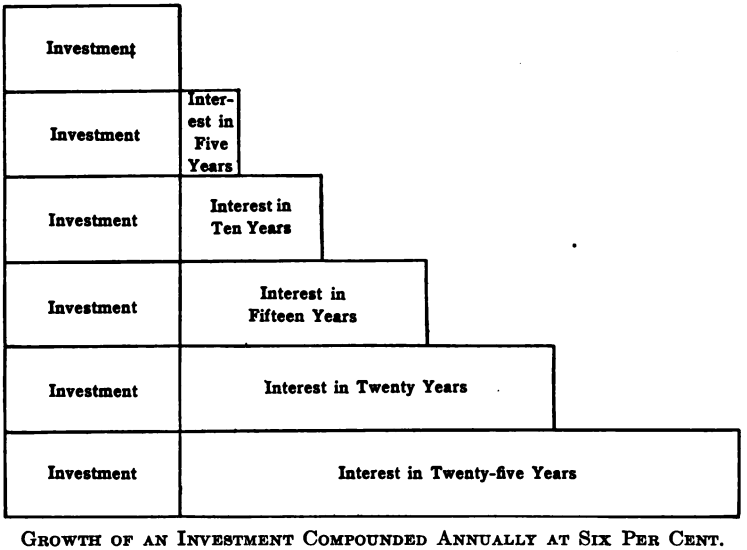
The twofold aspect of thrift. — The practice of thrift may result in a twofold benefit. First, the individual is sure to profit if he does not permit his thrift to degenerate into parsimony. The very spirit of wholesome saving stimulates sobriety, temperance, efficiency, and contentment. It creates a feeling of independence, tends to guard against accidental reverses, and provides for old age. Not less important, it makes the saver a better citizen, giving him an interest in society and government which he cannot have if he spends every dollar as it comes in. It is a well-known fact that a city of home-owners is likely to be a city of enterprise, of good government, and of good schools and churches. Back of all this lies the willingness of the individual to save. Second, society is also the gainer in the long run, though individual producers would feel the pinch of a decreased demand for their goods. But even they in time would as a class adjust themselves to the new condition. Society would, if thrift prevailed, possess not only more efficient and more contented members, but also a greater supply of wealth to be used in productive enterprises. No real sacrifice, it

must be said, is involved, either from an individual or a social standpoint, in an increase of thrift. It makes no demand that the individual shall forego any necessity or even comfort. It does, however, stand for sensible consumption, for a judicious comparison of values, and for the elimination of waste.

Some avenues for saving. — Thrift, we have every reason to expect, would be stimulated by a better understanding of the avenues through which savings can be made. The most outstanding institution in this respect is the savings bank, which readily accepts small amounts, paying depositors a reasonable rate of interest, usually in the neighborhood of three or four per cent. Even the national government has entered this field with its postal savings bank system. A much higher rate of interest can be got from stock in building and loan associations. Unlike deposits in savings banks, which can be made in any amount at any time, building and loan dues are payable at stated times in stated amounts. This very characteristic, the definiteness in time and amount, though it is galling to many people, works effectively to create habits of thrift and saving. What at first appears to be a burden, soon, by the very force of habit, becomes a fixed charge against income, which is handled exactly like rent or regular store bills. Small accumulations like these are first steps to larger investments. Periodically the savings bank depositor or the owner of building and loan shares is able to buy government or industrial bonds or even real estate mortgages. The interest from these larger investments becomes the nucleus of further savings, which in time ripen, as it were, into more bonds or mortgages. Thus, the process goes on until in time many a man finds himself in possession of a greater income from his savings than he can possibly get from his labor. The hardest part of saving, as any successful man will testify, is the beginning. A dollar appears too insignificant to be saved. Besides, there are so many things

its possessor feels that he ought to buy. But with foresight and a spirit of abstinence the typical American can save.

As a practical problem saving seldom appeals to young people of high school and college age. Yet of all classes they ought to



GROWTH OF AN INVESTMENT COMPOUNDED ANNUALLY AT SIX PER CENT.

acquire the habit, for a dollar saved at twenty is worth several dollars saved at forty. Early savings mean an early start in business, early home-owning, and early independence. A first-year high school boy who can begin to put five dollars a month into a building and loan association will, in the middle of his junior year in college, find himself in possession of five hundred dollars. Likewise the high school graduate who is about to take his first step into the business world can, by investing ten dollars a month in the same way, have a thousand dollars at the age of twenty-five. The saving problem becomes easy, to repeat what has already been said, after the first step has been taken.

REPORT OF THE PEOPLES BUILDING AND LOAN ASSOCIATION, APRIL 1, 1919

Assets

Loans on Real Estate Loans on Stock Pledged	$418,100.00
Interest due and unpaid	475.06
Fines due and unpaid	96.90
Installments due and unpaid	837.00
Real Estate	4,197.97
Judgments or Master's Certificates	6,445.07
Real Estate Sold on Contracts	1,231.00
Taxes advanced	174.89
Insurance advanced	19.08
Furniture and Stationery	400.00
Cash in hands of Treasurer	102.66
Cash in hands of Secretary	176.90
	$432,256.53

Receipts

Cash in Treasury	$233.25
Cash in hands of Secretary	24.44
Installments received	108,909.75
Interest received	31,884.52
Membership Fees received	77.00
Transfer Fees received	17.50
Fines received	478.50
Pass Book Fees received	45.00
Loans repaid or matured	103,600.00
Taxes repaid	408.49
Insurance Premiums repaid	67.70
Real Estate	242.00
Judgments	1,612.73
Real Estate sold on Contract	316.75
Contingent Fund	268.00
Installment Suspense	28.75
Expense Fees	447.72
Accounts payable	158,900.00
	$407,562.10

REPORT OF THE PEOPLES BUILDING AND LOAN ASSOCIATION, APRIL 1, 1919

Liabilities

Installments paid in	$299,829.00
Installments paid in advance	185.00
Installments due and unpaid	837.00
Interest paid in advance	15.77
Interest	1,857.78
Profit (divided)	50,184.93
Profit (undivided)	.30
Installment Suspense	28.75
Accounts payable	76,050.00
CONTINGENT FUND	3,268.00
	$432,256.53

Disbursements

Loans on Real Estate Loans on Stock Pledged	$ 93,000.00
Installments on Stk. withdrawn and matured	104,650.75
Interest or Profit on Stock withdrawn	25,582.67
Real Estate	254.14
Judgments or Master's Certificates	5,135.95
Taxes advanced	86.74
Insurance advanced	58.38
Accounts payable	170,800.00
Interest	5,454.88
Expenses — general	408.92
Expenses — salaries	1,500.00
Stationery, postage, and printing	82.09
Cash in hands of Treasurer	102.66
Cash in hands of Secretary	176.90
Miscellaneous Disbursements	268.02
	$407,562.10

TABLE OF VALUES AND SHARES

Series	*Dues Paid*	*Profits*	*Value Per Share*
25–A	$72.00	$18.40	$90.40
26–A	60.00	12.78	72.78
27–A	48.00	8.18	56.18
28–A	36.00	4.60	40.60
29–A	30.00	3.20	33.20
30–A	24.00	2.04	26.04
31–A	18.00	1.15	19.15
32–A	12.00	.51	12.51
33–A	6.00	.13	6.13
1–B	15.00	1.60	16.60
2–B	12.00	1.02	13.02
3–B	9.00	.57	9.57
4–B	6.00	.26	6.26
5–B	3.00	.06	3.06

18. SUBSTITUTION

Force of habit in consumption. — Very naturally one of the first points where thrift begins is the substitution of one good for another. Strongly opposed, however, to substitution — or to any other change — is the force of habit. All of us consume goods daily without giving second thought to the needs we feel, or to the satisfaction we secure. It is true that if such goods were entirely removed we should feel their absence and even complain of privation. Yet if some other good of like appearance were substituted we should not, in many cases, detect the deception. People become accustomed to use, for example, creamery butter, lard, pure apple cider, leather shoes, or solid silverware, and feel that nothing else could serve so well the purpose to which these goods are put. The basis for these wants goes scarcely deeper than taste or looks, for seldom if ever do we stop to analyze the satisfaction of deeper wants, such as cleanliness, comfort, or good health.

Extent of substitution. — The rise in prices which began about 1896 and which was accelerated by the Great War naturally turned the attention of both producers and consumers to the question of substitutes. The result has been that many goods have been compelled to compete with substitutes. At times the battle between the two has become intense. Butter and oleomargarine, for example, have contested for supremacy, the producers of each basing their claims for preference on uniformity in texture, cleanliness, and nutrition. In support of what was said in the preceding paragraph, the fact may be cited that tons of the latter have been consumed by hotel and restaurant patrons who, if they were questioned in the matter, would have declared their inability to eat any substitute for butter. Substitutes have been found for many other foods, such as wheat bread, olive oil, maple sirup, and eggs. Likewise, substitutes for numerous other kinds of goods have been discovered, until one scarcely knows just when he is buying leather, silk, cloth, furs, paints, or oils.

Merit in substitution. — The first feeling toward substitution is that it is more or less of a fraud, and that no substitute can possibly possess the merits possessed by the good it attempts to displace. Obviously, no such sweeping conclusion can be justly drawn, for until a careful comparison of the utilities yielded by two competing goods is made, no one can say which is the better either from the individual or from the social standpoint. We can conclude, however, that as between the two, all other things being equal, the cheaper is preferred.

EXERCISES AND PROBLEMS

A

1. What is the economic viewpoint of consumption?
2. How does this viewpoint differ from the ethical viewpoint?
3. How is consumption related to industrial efficiency?
4. Distinguish between unwise consumption and harmful consumption.
5. What are some of the motives that lead to unwise consumption? harmful consumption?
6. Why does the saving problem become easy after the first step?
7. How does substitution encourage thrift?
8. Distinguish between the social and the individual viewpoint of waste.
9. What is the relation between plain living and high thinking?

B

1. Make a list of ten articles the consumption of which is harmful.
   a. Would each be harmful at all times?
   b. Would each be harmful to all persons at any time?
   c. Which, if any, become harmful only with excessive consumption?
   d. Would everybody agree with your list?
2. Mention ten instances of waste that have come under your observation.
   a. How many of the ten were conscious wastes? How many unconscious?
   b. How could these wastes have been avoided?
   c. Were any of these wastes beneficial to *any* individual? Whom?
   d. Were any of them beneficial to society? Explain.
3. Suppose you begin now to save ten dollars a month, investing it in building and loan stock at seven per cent.
   a. In how many years would your stock be worth $1000?
   b. How could you invest this amount to an advantage?
   c. How many times could you repeat this operation before you are fifty years of age?

d. What would then be the total value of your investment?

e. Is this amount more or less than the total wealth of the average well-to-do individual at that age?

4. Make a list of food substitutions.

a. Why are these substitutions consumed?

b. Which are less palatable than the foods for which they are substituted?

c. Is there any popular prejudice against any of these substitutes?

d. How, if at all, is this prejudice being destroyed?

C

1. In discussions of the liquor business, what is the essential difference between temperance and prohibition? How could an individual support one without supporting the other? Which of the two is more intimately connected with government regulation? with moral education?

2. A few years ago a large manufacturing concern established its pay days on Wednesdays. Shortly afterward it changed back to Saturdays. Give reasons for the last change.

3. A farmer usually consumes much more food than a man living in the city. Does this mean that the farmer is overeating or that the city man is undereating? How, then, shall we determine how much food is sufficient for any individual?

4. "Americans grumble at the high cost of living. If they would look about they would see that a much greater evil is the cost of *high* living."

a. Has there been an increase in the cost of living?

b. What is meant by the expression "cost of high living"?

c. Is there any relation between the two?

5. "Americans are notorious spendthrifts. European shopkeepers have three prices for their goods: one for their native customers in moderate circumstances; another for native millionaires; and the highest for American tourists."

a. Why is the typical American liberal with his money?

b. What is the general notion about one who spends his money with care?

c. Account for the prevalence of the tipping habit in this country.

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PART III

PROBLEMS OF PRODUCTION

CHAPTER VII

ORGANIZATION OF INDUSTRY

19. Historical Background

The domestic system. — Until less than two hundred years ago practically all of the productive processes were carried on in the homes, either by hand or with the aid of crude tools and machinery which showed little improvement over those employed in the Middle Ages. Weaving, the chief manufacturing industry in England at that time, was done by men, like Silas Marner, who gave it their entire attention, or by the peasant farmers and their families, who combined weaving with agriculture. At one time the typical weaver bought his thread in the market and there he also disposed of his cloth. Later, so-called capitalists furnished thread to weavers and paid them for their labor, sometimes even supplying them with looms. Gradually, then, there began to emerge, in addition to the independent weavers, two classes of producers: one owned a portion or all of the capital invested; the other class did the weaving. Iron-smelting, machine-making, the manufacture of shoes, clothing, and hats, and practically every other form of production was carried on in a similar manner. The important thing to notice in this connection is the rise of a capitalist class which undertook to supply workmen with raw materials and machines and to dispose of the finished product.

The English industrial revolution. — Beginning about 1760, with the invention of improved spinning and weaving machines

and with the successful application of steam to machinery, English industry soon underwent radical changes. Home manufactures gave way to the factory system with its hum and noise, its long and steady hours, its discipline, and its deadening influence. The old-type capitalists became owners. The independent weavers and spinners became operatives, being compelled as a result of the change to leave their little plots of land with their gardens, poultry, and hogs, and to crowd about the factories in poorly built hovels. A similar change took place in all other lines of manufacturing. Workers gave up their tools and machines, and whatever hereditary rights they had in the land, thus cutting themselves off from a great deal of their traditional independence.

The American industrial revolution. — Fifty years later (1810) the American industrial revolution was under way. Samuel Slater, twenty years before, had introduced the factory system into the United States. The repressive commercial measures of Great Britain in her Orders in Council (1806 and 1807) and the edicts of Napoleon (1806 and 1807) had turned enormous quantities of American capital and thousands of laborers from commerce and agriculture to manufactures. Our own Embargo Act (1807) and Non-Intercourse Act (1809) had practically completed what the two great European powers had begun — the industrial isolation of the United States. The three years' war with Great Britain (1812–1814) further encouraged manufactures by providing them a government market. Thus, by 1816, when the first tariff law for the protection of American manufacturers was enacted, the American industrial revolution was an established fact. In comparing these two great industrial revolutions, it must be kept clearly in mind that the one in England was characterized by a change from home to factory methods, while the one in the United States was characterized by a change from commerce and agriculture to manufacturing.

Later developments in manufactures. — Both in England and in the United States the factory system spread until in time it characterized all forms of production. Home manufacture in either of these countries at the present time is a rarity. Practically every manufactured good we consume comes from some factory. Along with the factory system went the development of division of labor. From the first simple English weaving mills in which each operative carried on all the processes from the thread to the finished cloth, we have finally arrived at the place where each operative devotes himself to one specific, simple task. Consequently, he becomes a specialist in a short time. • Our chief concern in this connection is to remember that the growth and spread of the factory system has been largely responsible for important changes in business organization.

Railroad development. — Railroads, like manufactures, have undergone important changes since the first line in the United States was opened for business in 1830. Originally projected as local enterprises with local capital, they gradually became national in character and in service. Further consolidation and extension transformed them into great, through trunk lines, each line embracing thousands of miles and employing tens of thousands of workmen. Here again our chief interest lies in the fact that these developments have shaped, to a large extent, our methods and forms of business organization.

Developments in American agriculture. — Unlike manufactures and transportation, agriculture has undergone no radical changes in the matter of organization. Now, as has been the case for centuries, the typical farmer operates a single farm largely with his own labor and that of his family. He assumes all the business risks and enjoys all the profits. There have, however, been three developments in our agriculture which we must notice at this point. First, farmers produce more for the markets than they formerly did, selling their

products for money and buying goods which their predecessors had produced on the land and in the home. Along with this change has gone a growth of specialized farming in which each farmer concentrates on a few crops. Second, the invention and improvement of farm machinery has set free multitudes of laborers for other industries. Third, there has been a significant increase in the number of farm operators known as tenants, who, as the term signifies, do not own the land they operate.

20. The Single Enterpriser and the Partnership

Place of the single enterpriser in production. — The organization of a productive industry may take any one of three different forms: the single enterpriser, the partnership, the corporation. Each possesses advantages as well as disadvantages. Usually one of the three is better adapted than either of the others to this or to that industry, depending on its size, on the nature of its product, or on the character of its operations. We cannot say, therefore, which form of organization is best adapted to any particular industry until we know something about its character. We can, however, without special reference to particular industries, point out the advantages and disadvantages of each form of organization and draw general conclusions as to their adaptability.

The single-enterprise form of industry predominates in most lines of production. It has almost a complete monopoly in farming, it is the form most often met in retailing, and it still holds an important place in manufactures. Wherever small capital is sufficient and close supervision is required, we may expect to find a single enterpriser, who assumes all the risks of the business and enjoys all of its profits. Obviously, he controls his business alone and without interference. He can decide on policies and carry them out without consulting others. Thus, we can see why farming, retailing, and even manufacturing

are adapted to the single-enterprise form of organization. Few farmers would care to share the cultivation of a piece of land with others. Neither does the druggist, the grocer, or the confectioner ordinarily feel the need of dividing responsibility or profits with some one else.

Advantages and disadvantages of the partnership. — A partnership, to be brief, is nothing more than a mutual agreement between two or more individuals to undertake an enterprise. In business such an agreement is usually confined to production. Compared with the single enterpriser the partnership is at a disadvantage in the matter of business policy and authority. Unlike a single enterpriser, the member of a partnership must share more or less authority with others. Consequently, as often happens, the partners work at cross purposes, one advocating one business policy, a second advocating a different policy, while a third partner may disagree with both policies. Oftentimes, under such circumstances, it is found desirable to dissolve the partnership, it being necessary for the parties to agree mutually on some plan of dissolution. Profits, which the single enterpriser enjoys alone, must be divided among the partners. This division is made on the basis set forth in the agreements which partners usually make when the partnership is formed.

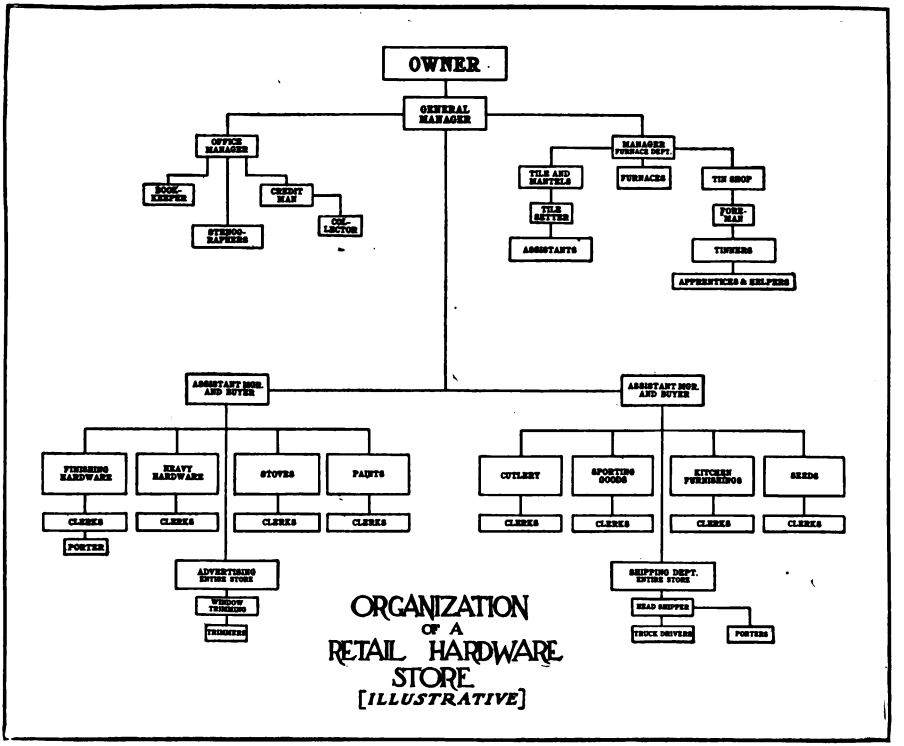
The mere fact that authority and profits must be divided among partners is not in any way indicative that partnerships are not necessary and profitable. We can easily imagine a situation where men desire to share authority with others, and where the profits going to each partner exceed what any one of them could possibly make in the same business. The old adage that "two heads are better than one" applies very well to the typical partnership. In the retail business, for example, one partner may possess special skill as a buyer of goods, another may be an exceptionally good organizer of hired help,

while a third may have marked ability in handling the finances of the business. Sometimes one partner merely furnishes the capital, taking no active part in the direction of affairs. Such a one is usually called a "silent partner." We may conclude, then, that a partnership offers advantages in at least two ways. First, it permits men possessing different kinds of abilities to unite, thereby increasing efficiency. Second, it makes possible the employment of larger capital, which, as we shall see later, contributes to increased production.

21. The Corporate Form of Organization

Nature of the corporation. — The corporation was the last of the three forms of organization to develop; and it developed only when single enterprisers and partnerships found that they could not, usually on account of insufficient capital, carry on certain kinds of industry to the best advantage. The government then stepped in and created artificial persons, which we know as corporations. The corporation, while it possesses many characteristics of a natural person, such as the ability to make contracts and to sue in the courts, has certain distinctive characteristics of its own. Its life is either limited to a specific number of years, or it is definitely unlimited, there being no uncertainty as in the case of a natural person. Its business operations are restricted to the purposes for which it was organized, and these purposes are stated specifically in its charter. Ordinarily, the manner in which it carries on its business, such as its methods of bookkeeping, is subject to more or less regulation by the government. The owners of a corporation are known as stockholders, who regularly elect a small number of directors from their ranks to manage the business. The directors in turn elect the president, secretary, treasurer, and other officers, to whom they usually delegate the actual management of affairs.

Advantages and disadvantages of the corporate form of organization. — The corporate form of organization has an advantage over its two rivals in at least three respects: (1) it diffuses financial responsibility, (2) it survives the death of its owners, and (3) it permits of larger accumulations of



capital. A single enterpriser, as we have seen, must assume all of the financial risks of his business. Likewise, in a partnership each partner is financially liable for the entire indebtedness of the partnership. For that reason few persons,

unless they can assist directly in managing its affairs, care to assume the financial responsibilities which a partnership imposes. In a corporation, however, the situation is different. There each stockholder is ordinarily liable only for the stock he owns; that is, he cannot be held for the debts of the corporation. In other words, his liability to loss is confined to the investment he has already made. Moreover, the death of a stockholder does not, as in the partnership, dissolve the organization of which he is part owner. Consequently, many men who could not or would not become either single enterprisers or partners are easily persuaded to become stockholders in corporations. The result is the much larger accumulation of capital than otherwise would be possible.

Stockholders and bondholders. — Strictly speaking, stockholders are enterprisers; that is, they are the individuals who assume the risks of business and enjoy the profits of their enterprise. In other words, they are the owners. The evidence of ownership in any corporation is the stock certificate, which bears on its face three important facts: (1) name of the owner, (2) number of shares, (3) par value of each share. Many corporations issue two kinds of stock, preferred and common. Preferred stock bears a definite dividend rate, which, so far as the corporation may be able, is guaranteed. It may also carry a preference in voting or in the division of assets, should the corporation decide to liquidate. Common stock, on the other hand, yields its owner dividends only after dividends have been paid on the preferred stock. To state the same fact in another way, the owners of common stock get all the profits over and above the amount necessary to pay dividends on preferred stock. Here we find the explanation for the wide variation in the value of many common stocks. When a corporation is merely able to pay its preferred dividends the value of its common stock ordinarily drops very low. When, on the

other hand, the same corporation is exceedingly prosperous the same common stocks rise in value, often selling for more than preferred stocks. If, to illustrate the case, a corporation which has equal amounts of preferred and common stocks should earn but seven per cent, which is a normal rate, on its entire capitalization, it is likely that its common stock would sell in the neighborhood of par. If, however, the same corporation should earn twenty per cent instead of seven, the common stock would command a high price, say 400.

Thus far in our discussion of corporations we have assumed that the stockholders alone furnish all the capital required. In practice, however, corporations, like single enterprisers and partnerships, usually find it necessary to secure funds from outside sources. The two last named secure their funds on promissory notes; the first, on bonds. These bonds are similar to real estate mortgages in that property in each case is the basis of security, and like mortgages they are evidences of indebtedness. Bonds bear a definite rate of *interest*, and do not entitle holders to share in any extra prosperity the corporation might enjoy. Consequently, fluctuations in the value of bonds are much less than they are in the case of stocks. Of the two forms of investment, bonds are less speculative, being preferred by those who place security and a low rate of income above risk and a higher rate.

The stock exchange. — With the beginning of the corporate form of organization there also began a desire on the part of persons to buy and sell stocks and bonds. Soon a need was felt for some sort of central market where buyers and sellers, or their agents, could meet to bargain. The result was the stock exchange, such as the one in New York City, where the members come together daily for the purpose of buying and selling stocks and bonds, usually for their customers. The development of such a central market has affected favorably the growth and

spread of corporations. Investors are easily persuaded to buy stocks and bonds, since they know that they can dispose of them without difficulty. In other words, investments in stocks and bonds are *liquid* investments. Consequently, billions of dollars have been saved to industry, which otherwise would have been consumed or invested to less advantage.

Corporations and funded incomes. — Corporation development has made savings and investments permanent as well as easy. Not many years ago it was a common saying that in America it was but "three generations from shirt sleeves to shirt sleeves," meaning thereby that one generation saved, the next squandered, the next saved, and so on in an endless round. Whatever may have been the validity of this saying a half century ago, it certainly has not been true since corporations have come to occupy such a large place in American industrial life. Now a boy does not need to be able to succeed in business in order to keep his inheritance intact. He can invest it safely in bonds, or even in stocks, enjoying the income while he lives, passing the principal on to the next generation. Such an income is known as a *funded* income. The facility to invest huge sums of money with a reasonable degree of safety accounts in large measure for numerous other modern developments. Life insurance companies, for example, owe much of their growth and prosperity to the ease and slight expense with which they can invest their funds. Otherwise, their chief source of investment would be real estate mortgages, which, while safe, are expensive to handle. Many colleges and universities, too, owe their rapid development not more to the generosity of friends than to the opportunity they have to invest their endowments. Numerous other institutions, such as libraries, hospitals, learned societies, and settlement houses, have their endowments invested in the same way.

EXERCISES AND PROBLEMS

A

1. What was the essential difference between the English Industrial Revolution and the American Industrial Revolution?
2. What does an "industrial revolution" mean?
3. Is there likely to be another industrial revolution? Why, or why not?
4. Name three important changes in agriculture during the past half century.
5. How did the tariff act of 1816 differ from preceding tariff acts?
6. What is meant by the expression "domestic manufactures"? "factory system"?
7. What are the disadvantages of a partnership?
8. Why did the corporative form of business organization develop?
9. What are the chief merits of this form?
10. What is a "corporation charter"?
11. Where and how is it usually obtained?
12. Distinguish between stocks and bonds.
13. Why are most farms operated by single enterprisers?

B

1. Make lists of single enterprisers, partnerships, and corporations in your neighborhood.
   a. In which list are found the concerns that employ the largest capital?
   b. What kinds of business, in general, characterize each of these lists?
2. Get, if possible, a partnership agreement from some business man.
   a. How much money did each partner invest?
   b. What specific duties are required of each partner?
   c. How may the partnership be voluntarily dissolved?
3. Write up what you would consider a good partnership agreement for three men about to engage in the grocery business.
4. Examine a stock certificate, and notice the following facts:
   a. Name of owner.
   b. Number of shares.
   c. Par value of each share.
   d. Common or preferred.

5. Study a stock report, to be found in any metropolitan newspaper.
   a. Notice the wide variation in the prices of stocks.
   b. Why do not bonds vary so widely?
   c. Compare price of common stock and price of preferred stock of the same concern.
   d. Which is subject to wider fluctuations? Why?

C

1. Comment on the following statement: "The enactment of corporation laws by the various states is the most important step in the development of American manufactures made during the past century."
2. "A corporation is nothing more than a person without a soul."
   a. Explain the general attitude of corporations toward society.
   b. Why do many persons think it permissible to cheat a corporation?
   c. Can a corporation die? Explain.
3. A corporation with a capital of $50,000, having outstanding four per cent bonds with a par value of $50,000, earns $5000 annually.
   a. How will these earnings be divided?
   b. What will be the dividend rate:
      i. If all the stock is common?
      ii. If all the stock is preferred?
      iii. If one-half of the stock is eight per cent preferred?
   c. What would be a fair market price of stocks under each condition?
4. Suppose a corporation with a capital of $100,000, having outstanding five per cent bonds with a par value of $50,000, should fail. How would settlement be made if the total assets sold for $45,000? for $55,000? for $75,000? for $100,000? How, if a partnership?

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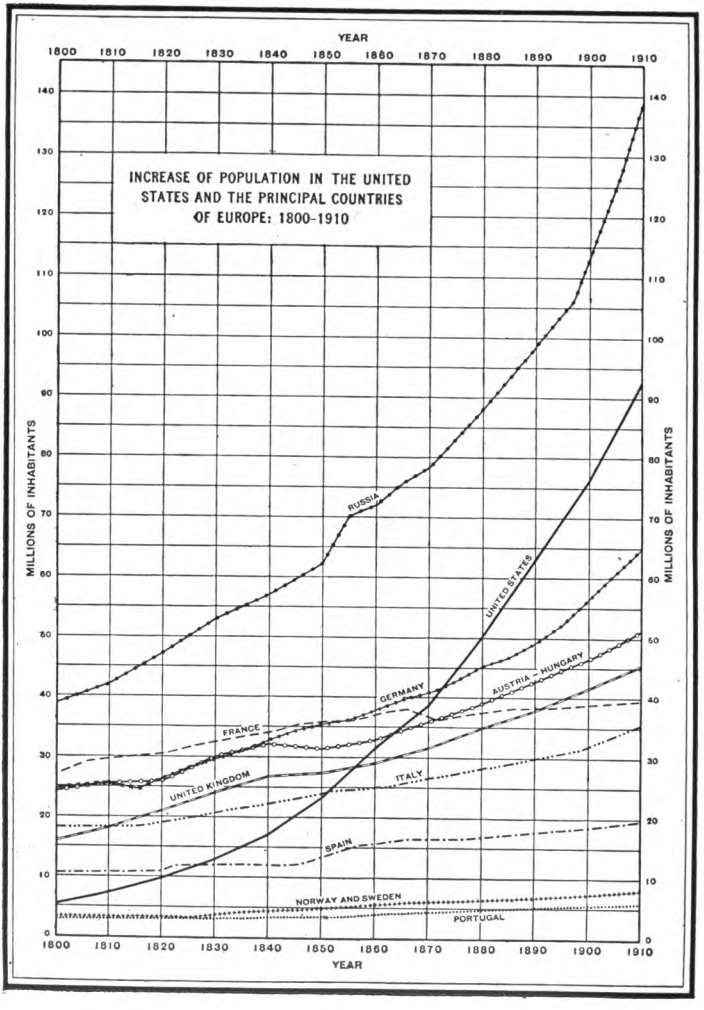
CHAPTER VIII

DIVISION OF LABOR AND LARGE-SCALE PRODUCTION

22. The Factors of Production

Primary factors of production. — We have come thus far in our study of production without stopping to inquire about the factors, or forces, that make production possible. But there is need at this point to classify these factors and to examine briefly the part each plays in producing goods.

The two primary factors of production are land and labor. Of these two, the most important, certainly the one that came first in point of time, is land. The term "land" in economics includes more than farm lands. It embraces city lots, railroad rights-of-way, forests, mines, lakes, rivers, harbors, and oceans. Land furnishes not only our food and clothing, but also our homes, our automobiles, and every other commodity we may possess. Besides, it provides a place on which to live, to work, to play, to sleep. Even before the first man had felt the need to labor, land had been producing for ages. Witness our vast coal beds. What man or group of men had anything to do with their formation? Yet we mine the coal and carry it away without even a thought of the force that land has exerted to produce it. We do, however, approach a proper appreciation of the importance of land, when it fails unexpectedly to produce, as is the case when a widespread drought prevails in grain-growing regions, when we feel a deprivation resulting from the extinction of some fur-bearing animal, or when we see the havoc caused by a mine subsidence within the limits of a populous city.


INCREASE OF POPULATION IN THE UNITED STATES AND THE PRINCIPAL COUNTRIES OF EUROPE: 1800-1910
YEAR
1800 1810 1820 1830 1840 1850 1860 1870 1880 1890 1900 1910
MILLIONS OF INHABITANTS
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140
RUSSIA
UNITED STATES
AUSTRIA-HUNGARY
GERMANY
FRANCE
UNITED KINGDOM
ITALY
SPAIN
NORWAY AND SWEDEN
PORTUGAL

Land works blindly, and apparently without purpose. The same force that stored the coal in the earth raised useless mountain peaks. This force can, however, be directed. In fact it is directed by man. This direction we call labor. Historically, as well as in degree of importance, labor ranks second to land, since without land labor could not even exist, much less produce. Whatever our own narrow experience may be, we know that the most universal, conscious activity, aside from consumption, is labor. On the farm, in the shop, store, and office, about the home, men and women, and even children, labor daily to produce commodities for the satisfaction of human wants. Strange as the statement may appear, labor in large part is a habit, which robs it fortunately of much of its irksomeness.

Secondary factors of production. — Obviously, the third factor of production, *capital*, came after labor and land. Primitive man soon learned, in a blundering way perhaps, that he could well afford to spend labor on the making of a bow and arrow, or on a stone ax, since by their use he could secure more game or more fuel than was possible working with his hands alone. At that moment capital came into existence. It is well to notice that this first capital was itself the product of a combination of land and labor, and that all capital, rather indirectly to be sure, rests on the same two primary factors of production. This very fact is the basis for the claim that all the products of industry belong to labor. Turning again to the creation of the first capital, let us formulate a definition of the term as used in economics. Obviously from what has been said, it was the product of industry, also it was used to further production. *Capital, then, is a product of industry used for further production.*

On the basis of this definition we shall find it necessary, contrary to general belief, to consider neither land nor consumers' goods as capital. Land, obviously, is not a product of

industry, though it is used for further production. Consumers' goods, on the other hand, are the product of industry *not* used for further production. Whether or not a good is a producers' or a consumers' good usually depends on the use to which it is to be put at the particular moment. Wheat flour, for example, in the possession of a baker is a producers' good; in the flour bin at home it is a consumers' good.

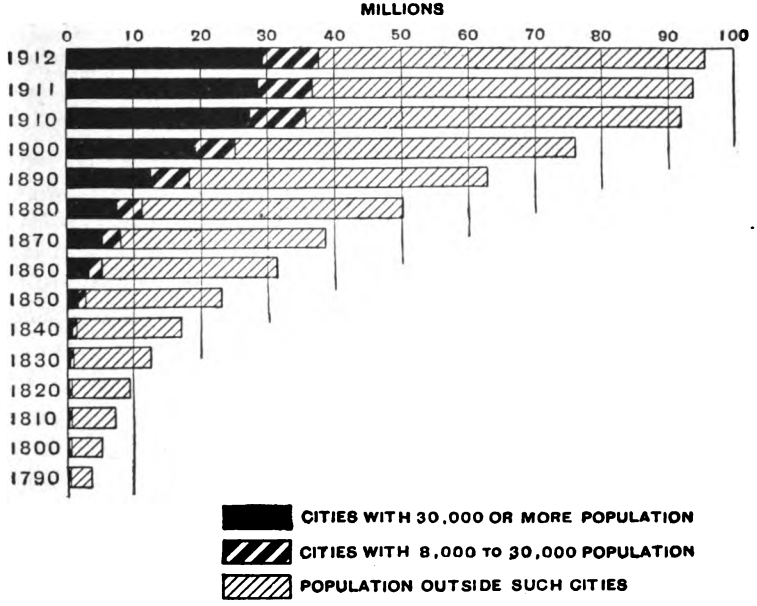
The fourth factor of production, we may say, is the enterpriser, or business man. His duty is to assemble the other factors and to direct their efforts. It is not, however, an indispensable one, for it would be easy to conceive an industrial society rather highly developed without men exercising the distinctive duties of an enterpriser. Yet we must not forget that society as it is now organized utilizes the services of such men; also that if each man worked for himself and confined his own consumption exclusively to his own products, the efficiency of his production would depend in some measure on his ability to organize his own labor, his own land, and his own capital. For that reason we are justified in calling the skill of enterprisers a factor of production.

23. Division of Labor

Varieties of division of labor. — In the early life of a people and on the frontiers of older nations, every man must necessarily be a jack-of-all-trades. He must clear his land, build his fences, construct his cabin and sheds, make his own furniture, tan the leather for his shoes, and perform many other similar tasks, all of which are necessary to his very existence. As population increases, each one gives more and more attention to the trade or profession he is best prepared to follow. Some become carpenters; some, farmers; some, blacksmiths; and some, tanners. The carpenter, for example, spends his whole time engaged in his trade, and he is able to perform all the opera-

tions which are necessary in erecting a building. He does the finishing work as well as erect the frame. Moreover, he makes doors, glazes windows, and builds furniture. Likewise the farmer, the blacksmith, and the tanner, each performs all the

POPULATION OF THE UNITED STATES IN MUNICIPALITIES HAVING OVER 30,000 INHABITANTS, IN THOSE HAVING FROM 8,000 TO 30,000, AND OUTSIDE SUCH MUNICIPALITIES: 1790–1912.



operations necessary to carry his product from the raw material to the finished state. This stage of industrial development characterized American life and industry for two centuries; and we may call it *simple division of labor*.

The next step in the development of division of labor consisted in dividing the operations of a single trade among in-

dividuals or groups. Instead of the carpenter, we have workmen for the rougher work, others for finishing, others for door and cabinet work, and still others who specialize in glazing. This stage we call the *complex division of labor*, and we may observe its operation all about us in every craft and profession. Carpenters alone no longer build our houses. To assist them we employ masons, plasterers, plumbers, and electricians. Professional people likewise specialize in narrow fields. Some physicians give their whole time to particular ailments; lawyers become highly trained in particular kinds of work; while teachers confine their attention to as few subjects as possible.

Perhaps the best example in the development of the division of labor is found in the manufacture of shoes. Under pioneer conditions a workman tanned the leather and from it made shoes for himself and family. Later he gave his whole time to making shoes, disposing of the surplus to his neighbors. At the present time the making of shoes is confined almost entirely to factories, where scores of men perform as many different operations in making a single shoe.

The encroachment of the complex division of labor on crafts and trades has had a curious effect. It has, as it were, robbed the craftsman of his skill. Shoemakers no longer make shoes, neither do watchmakers make watches, while a tailor shop is often nothing more than a place for repairing, cleaning, and pressing clothing.

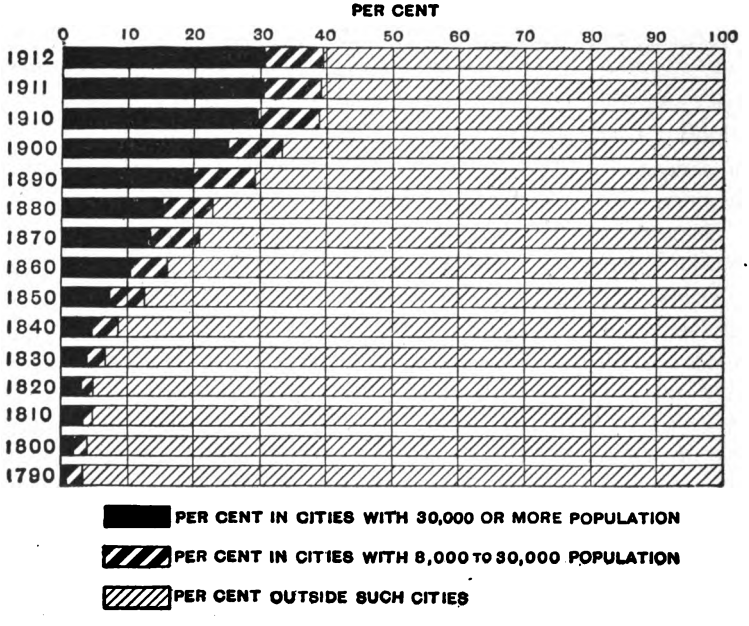
Human qualities necessary for effective division of labor. — The more complex forms of division of labor have developed with, and depended on, a corresponding development of the spirit of coöperation and mutual helpfulness among individuals. In any highly developed industry, the making of shoes, for example, the efficiency and progress of one worker depend on every other worker being in his place at the proper time and performing exactly the operation which he is expected to per-

form. The failure of one workman properly to coöperate disorganizes the whole series of operations and lessens the total output; and such failure on the part of an individual or of individuals leads not toward a higher stage of division of labor, but rather in the opposite direction.

We may properly inquire, then, what are the chief characteristics which individuals ought to possess in order to bring division of labor to its highest point of development. They are four in number: (1) honesty, (2) obedience, (3) steadiness, (4) fairness.

Honesty is the very heart of successful division of labor. Workers, in order to be highly efficient, must believe in their associates as well as in themselves. Each one must have the assurance that his fellow workers are performing their appointed tasks honestly and with a common purpose. Among dishonest men such an assurance would be impossible. Workers must also be obedient in following plans of operation; for complex division of labor, and even the simpler kinds, provide for those who plan as well as for those who execute. Workers engaged in specialized tasks must be steady as well as honest and obedient. Nothing disturbs industry more than the failure of workers to be on hand at the appointed time, or, if on hand, to be incapacitated by vicious habits. To take an extreme example, suppose the engineer of a shoe factory should fail to be in his accustomed place when the moment arrived for starting the machinery. Obviously, little or no work could be done until he was found or his place was filled. There are men who possess all these qualities in some degree, but who, nevertheless, retard the development of division of labor simply because they are so filled with prejudice, and so set in their ways, as to make them domineering, and hence unpopular among their associates. In other words, they are mentally unfair. Thus, workers in any line where division of labor is developed must coöperate not only indus-

PER CENT OF TOTAL POPULATION OF THE UNITED STATES IN MUNICIPALITIES HAVING OVER 30,000 INHABITANTS, IN THOSE HAVING FROM 8,000 TO 30,000 INHABITANTS, AND OUTSIDE SUCH MUNICIPALITIES: 1790–1912.



trially, but also socially, each giving and taking in a spirit of conciliation and compromise.

Economic and social advantages of division of labor. — Obviously, the first economic advantage of division of labor is an increased production. The early shoemaker, by confining his attention to the making of shoes, increased his skill, with the result that his product was greater than it had formerly been when he was compelled to tan his own leather. Likewise, the workers in a shoe factory become highly proficient in the few simple operations which they perform, and though their in-

creased output may not be so evident as it was in the former case, it exists nevertheless. Division of labor has still another economic advantage. The few simple operations that characterize complex division of labor are easily learned, and for that reason no long period of training or apprenticeship is necessary, as was formerly the case. Consequently there is a saving of time both by the employee, who quickly becomes a skilled operative, and by the employer, who finds it unnecessary to spend any great amount of time in training his workmen. The chief economic advantage of division of labor, to repeat, is increased output, which is accomplished to a great extent through specialization, and through a saving of time formerly necessary to acquire skill.

Socially, there are advantages to be derived from complex division of labor. The same qualities that make workers industrially efficient and teach them to coöperate also develop the spirit of social service, and do much to rob the individual of his selfishness. Men who work together all day are easily organized into unions and social clubs. Their close contact in industry gives them a common interest and assists in creating a social solidarity.

Division of labor produces yet another social advantage. With increased production it is no longer necessary for workers to labor twelve or fourteen hours a day. Moreover, the workers themselves through organization have become stronger, and better able to secure their demands. These two forces have combined to shorten the labor day, and correspondingly to increase the daily periods of leisure. The result is that workers in specialized lines have more time for recreation, for social intercourse, and for self-education.

Disadvantages of complex division of labor. — Not all of the results that arise from highly developed division of labor are advantageous, either to the individual or to society. The monotonous repetition of simple operations tends to stunt the intellect, and to destroy the power of initiative. Moreover,

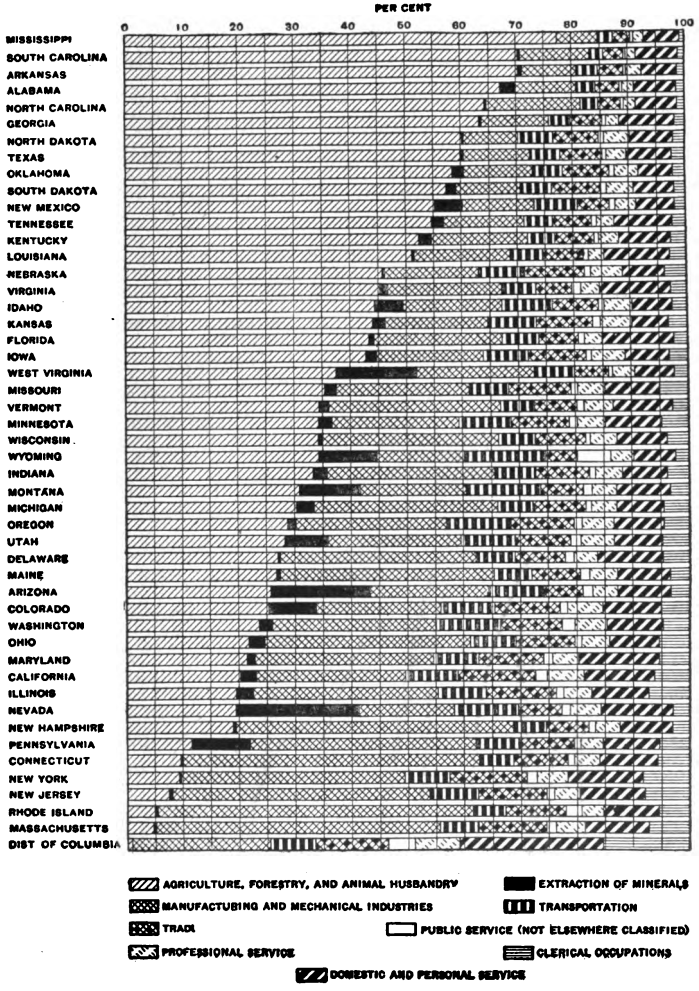
it discourages ambition, since it narrows the horizon of the worker and appears to offer him little or no opportunity to improve his industrial position. In short, complex division of labor tends to rob the individual of intellect, initiative, and ambition, all of which are essential to the best interests of society. In the professions, however, similar specialization appears to be less deadening, if it is deadening at all.

24. Territorial Division of Labor

Principle of the territorial division of labor. — Quite as important as the division of labor among individuals and among groups where each performs a highly specialized piece of work, is the division of labor among localities and regions. This we may call *territorial division of labor;* and its development has depended in large measure on improvements in transportation, particularly railway transportation, and on the use of money as a medium of exchange. In medieval England and during our own colonial period each section or region was well-nigh self-sufficing; that is, it produced practically all the goods consumed by its inhabitants. Similar conditions existed on the western frontier during the greater part of the nineteenth century.

Territorial division of labor, as has been noted, waited for its development on improved methods of transportation and on a money economy; yet the underlying causes for its existence are as old as time itself. Soil, climate, water power, mineral deposits, and a variety of other natural resources create differences among the various sections of a large country like the United States and among the smaller countries of Western Europe. As a result, the people of one section can best afford to spend their energies in raising wheat, of another in growing grapes, of another in herding sheep, of another in building ships, and of another in manufacturing iron or cloth. Each section, assisted by nature and by an increased skill and knowledge due

PROPORTION OF POPULATION 10 YEARS OF AGE AND OVER, IN EACH STATE, ENGAGED IN EACH GENERAL DIVISION OF OCCUPATION: 1910.



to specialization, produces commodities of a greater value than it could produce were it compelled to engage in other and less productive industries. Hence, it produces a surplus, which it exchanges for the surpluses of other sections.

Territorial division of labor in the United States. — In no other country has territorial division of labor developed more rapidly and to a greater extent than in the United States. Here we have a diversity of natural resources, which are utilized to advantage by a people naturally apt and trained above the average. Nowhere else are there, on such a large scale, more fertile farm lands, more productive mines, and more accessible water power. For that reason the United States has become a great manufacturing nation, without losing its position as the leader in agricultural production.

The particular reasons for the superiority of one section over another in any line of industry are fairly easy to understand. In New England, fertile land is scarce, an adequate fuel supply is relatively close at hand, and the population is dense. There we find manufactures. A similar condition exists in New York, Pennsylvania, and New Jersey. The great Mississippi Valley, which is the largest area of fertile land in the world, furnishes foodstuffs in the form of corn, wheat, cattle, and swine. Here also are to be found many manufacturing establishments, for the city population is large and the mineral supply is available and plentiful. The southern and southwestern sections produce cotton; the Pacific Coast, fruit, lumber, and grain; the Rocky Mountain regions, minerals and lumber.

25. Large-scale Production

Advantages of large-scale production. — One of the most common phenomena to be observed in business at the present time is large-scale production. Almost every line of industry

has felt its influence. Rapidly our factories have been enlarged; and our railway lines lengthened and consolidated into great systems. Even in retailing, the advantages of large scale production have been demonstrated. Agriculture alone seems to stand unaffected, with the result that the average size of farms in the United States is less than it was a half century ago.

The adaptation of the principle of large-scale production to American industry has created several distinct and highly important problems. Obviously, the first result is an increased output, and the distribution of this increase among the various factors of production (labor, including the enterpriser, land, and capital) creates problems both social and economic. Large-scale production causes the concentration of workers, and this concentration raises problems of housing, of government, and of social development. Furthermore, large-scale production permits of a decreased unit-cost production, with the result that small industries are driven out of business, while the large ones tend to become monopolies. Such a development has actually taken place in the United States, where many lines of production have fallen into the hands of the so-called trusts.

We have seen how large-scale production increases the output at a decreased cost, and we may now properly inquire why such is the case.

The factors that contribute to the efficiency of large-scale production are five in number. (1) Division of labor, which always accompanies large-scale production, permits the use of varied talents and aptitudes, whereby each worker can confine his attention and efforts to the particular operation in which he is the most proficient. (2) The latest and most improved machinery can be utilized, something which is usually impossible in small-scale production. In the Chicago plant of the International Harvester Company is a machine costing several

thousand dollars which performs a simple operation on wagon and other tongues at a saving over old methods of a few cents each. Obviously, such a saving, which mounts high in the aggregate, is possible only when the volume of output is enormous. (3) Large-scale production also permits of economies in buying raw materials and in selling finished products. It is a well-known fact that large purchasers can buy at a cheaper price than small ones; and equally as well known that large producers are able to economize in the matter of advertising, and of getting their products in the hands of retailers through traveling salesmen. (4) Large-scale industries are better able to utilize their by-products. In the slaughtering industry, for example, a large plant can make use of hair, blood, and other by-products which the local butcher allows to go to waste. (5) The large-scale producer can better afford to carry on expensive experiments with the idea of improving his product and of lessening unit cost. So well recognized is this advantage that such large concerns as the United States Steel Corporation maintain extensive laboratories and employ a great many trained experimenters.

Restrictions on large-scale production. — There are several restrictions on large-scale production, one or two of which we may profitably examine at this point. First of all, any industry is likely to grow so large as to become unwieldy. Such an industry is no longer the " child " of the one who developed it. It is now impersonal. Consequently, its administration and management is divided among hired superintendents: each ambitious to develop his own department; each more or less selfish in his attitude toward the whole industry; and none with the keen interest of the owners of smaller plants. When a unit of industry reaches this stage in the development of large-scale production, it is likely to be less efficient than smaller ones in the same line of business. Such industries resemble in many

respects the overgrown trees of the forest, towering above their fellows in height, but rotten at the heart and exposed to every passing storm.

EXERCISES AND PROBLEMS

A

1. Why is land the most fundamental factor of production?
2. Why is capital less fundamental than either land or labor?
3. Distinguish between capital and land; capital and consumers' goods.
4. Does capital yield a product apart from the employment of labor? Explain.
5. What are the advantages of division of labor?
6. Suggest ways of lessening the disadvantages arising from the division of labor.
7. What factors may limit the division of labor in any industry?
8. What is the relation between the corporative form of organization and division of labor?
9. Why is division of labor in agriculture not practiced to any great extent?
10. How does territorial division of labor increase the efficiency of production?
11. What is the present tendency in the United States as to territorial division of labor?
12. Point out the relation between division of labor and large-scale production; between the corporative form of organization and large-scale production.
13. Are there any advantages in large-scale production in agriculture? Explain.
14. What are the limits to large-scale production?
15. What are the present tendencies as to large-scale production in manufactures?

B

1. Make a list of consumers' goods.
   - *a.* Explain why each is a consumers' good.
   - *b.* Can any of them be producers' goods?
   - *c.* What is the essential difference between consumers' goods and producers' goods?

2. From your own experience or observation describe the division of labor carried on in some shop or factory.

3. Call to mind persons who produce *all* the goods they consume; who produce a *portion* of the goods they consume; who produce *none* of the goods they consume. Which is the largest group? Why?

4. Make a list of common schoolroom objects, such as desk, blackboard, book, crayon, ink, eraser, and note the importance of territorial division of labor.

5. Mention several industries in the same line.
   a. In which is division of labor best developed?
   b. Show how there is room for greater development.
   c. In which is division of labor least developed?
   d. Account for this lack of development.
   e. Which of the two has the greater capital?
   f. Which is the more enterprising?
   g. Suggest methods of improvement.

C

1. A well-known retail merchant once said that the cornerstone of any business success is *honesty*.
   a. What did he mean by the expression "honesty"?
   b. Is an employee thoroughly honest who:
      i. Shirks his duties?
      ii. Keeps one eye on the clock?
      iii. Places his employer's interests second to his own?
   c. What is your opinion of the axiom, "Honesty is the best policy"?

2. It is believed by many people that each section of the country would be greatly benefited by becoming self-sufficing.
   a. If such were the case, would there be more or less goods produced?
   b. How would such a condition affect wealth? welfare?
   c. How do the railroads regard self-sufficiency?

3. Comment on the following statements:
   a. "Division of labor is the unconscious coöperation of the members of society."
   b. "Producers' goods ripen into consumers' goods."
   c. "Large-scale production in any industry is limited only by the amount of capital which that industry can control."

SUPPLEMENTARY READING

BULLOCK, *Introduction to the Study of Economics*, 3d ed., pages 149–156, 176–184.
ELY, *Outlines of Economics*, 3d ed., pages 19–21, 124–129.
FISHER, *Elementary Principles of Economics*, pages 193, 450, 451.
JOHNSON, *Introduction to Economics*, pages 110–120.
SEAGER, *Principles of Economics*, pages 153–169.
SELIGMAN, *Principles of Economics*, 5th ed., pages 290–296.
TAUSSIG, *Principles of Economics*, 2d ed., Vol. I, pages 30–66.

CHAPTER IX

LAND (NATURAL RESOURCES)

26. Land as a Productive Factor

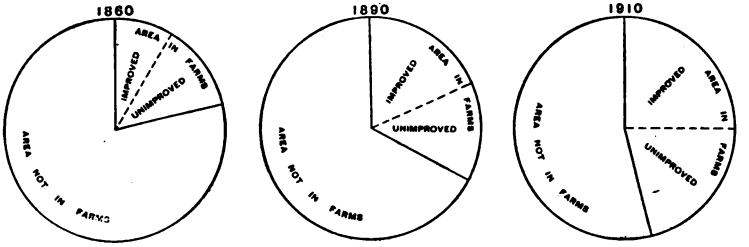
Nature and definition of land. — We have noticed already that land, which is a short and expressive term for natural resources, is one of the factors of production; and that the other two chief factors, labor and capital, are useless without its coöperation. Now we may properly turn our attention to a more detailed examination of the part which land plays in the production of economic goods.

Land is the basis of all production, the source of all economic wealth. From it, directly or indirectly, come all of the raw materials on which the whole process of production rests. Labor and capital take the raw materials of nature, and then create, as we have seen, utilities of form, place, time, or possession, but farther than that they cannot go. Land as such labors without reward, and its products are free to him who will come and take them; who under conditions of modern society is the landowner. Of the three chief factors in production, land alone is incapable of being appreciably increased in amount: for all practical purposes the surface of the earth is fixed in area, and its productive qualities are fairly well known. At least they are predetermined, and merely wait to be utilized by labor and capital.

To get a clearer understanding of the term "land," let us divide it into its numerous subdivisions. There is the large area of farm land from which the world gets its food supply and a great deal of its material for clothing; the forests provide lumber and

fuel; city lots furnish sites for dwellings, stores, warehouses, and factories; from the mines come fuel, iron, and precious metals, and from the quarries, stone for building and other purposes;

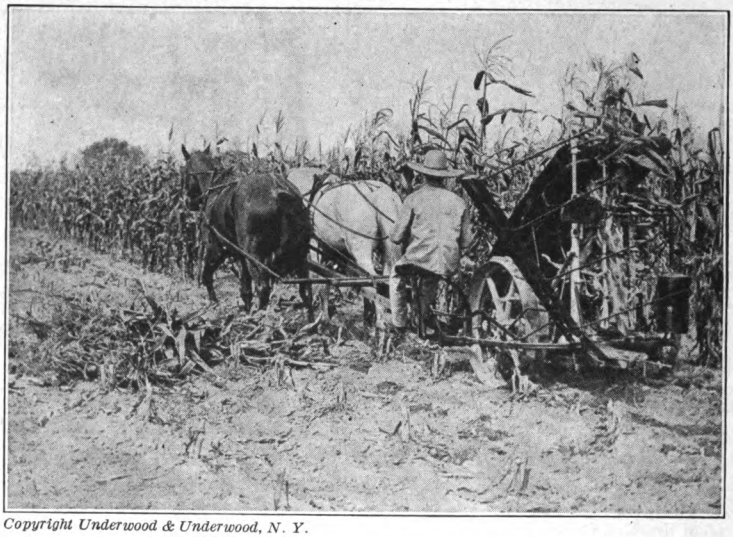
RELATIVE PROPORTION OF IMPROVED AND UNIMPROVED LAND AREA IN FARMS TO THE TOTAL LAND AREA OF THE UNITED STATES: 1860, 1890, 1910.



waterfalls generate power; while waterways, harbors, and railroad lands facilitate the transfer of goods from the producer to the consumer. All these are but different phases of the same factor — namely, land, or natural resources.

Varying costs in production. — From what has been said it will readily be understood that, inasmuch as nature is stingy and has seen fit not to distribute her bounties everywhere alike, the productivity of land varies from one piece to another. That this statement is true, can be verified on every hand. One plot of ground produces more wheat than another of the same size on which an equal amount of labor and capital has been expended. Similarly, one building lot yields more utilities than another; and one mine is more cheaply worked than another. In the first case, the most important factor, though by no means the only one, is fertility; in the second it is location; and in the third it is depth of shaft and thickness of vein. But in any of the three cases nature has contributed in varying degrees of effectiveness, thereby causing differences in the costs of production.

Our more general experiences in varying costs of production are with agriculture. One farmer cultivates soil especially adapted to corn-growing. Another farmer, on land less fertile, labors just as hard and employs an equal amount of capital. Yet he gets smaller returns. Still another farmer, on the poorest land, which we shall, in anticipation, call no-rent land, grows exactly enough corn to repay him for his employment of



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A Modern Method of Harvesting Corn.

labor and capital. Obviously, the first farmer enjoys a relatively large return over and above his costs of production; the second one, a fair return; while the farmer on the no-rent land gets no such return. Thus, other factors in fixing the costs of growing corn, such as location, skill in farming, improvement in the arts, remaining the same, the unequal contribution of natural resources in the form of fertility, climate, and rainfall causes a corresponding difference in costs of production to corn-growers.

Scarcely less important in causing varying costs of production in growing corn, or any other agricultural crop, is location. Our farmer who cultivates the best land might lose the advantage coming to him from the use of the most fertile soil, if his farm were located in some region remote from transportation facilities; that is, his gain from fertile soil might be offset by his loss through costly transportation. For that very reason farm lands situated near markets or at least near good transportation lines, rail or water, ordinarily command higher prices and higher rents than would be the case if less advantageously located.

Concrete examples of varying costs of production in agriculture due to the unequal distribution of the gifts of nature or to differences in costs of transportation are easily found in the United States. New England farmers, as a class, have less fertile soil than Iowa farmers. Hence, their cost of producing a bushel of corn is higher than it is in Iowa. Also in Iowa two pieces of land of the same fertility may show differences in unit-cost of production owing to the superior location of one or the other in respect to transportation.

In the use of any other form of land — city lots, mines, waterfalls — similar differences arise. Two merchants of equal ability, with stocks of goods exactly alike, will carry on their respective businesses at different costs of production if the two pieces of land which they utilize are not similarly situated as to the passing crowds. Likewise, the owners of mines find differences in costs of production owing to the depth of the ores, and the location of the mines. Everywhere in the use of land these differences appear, causing differences in costs of production.

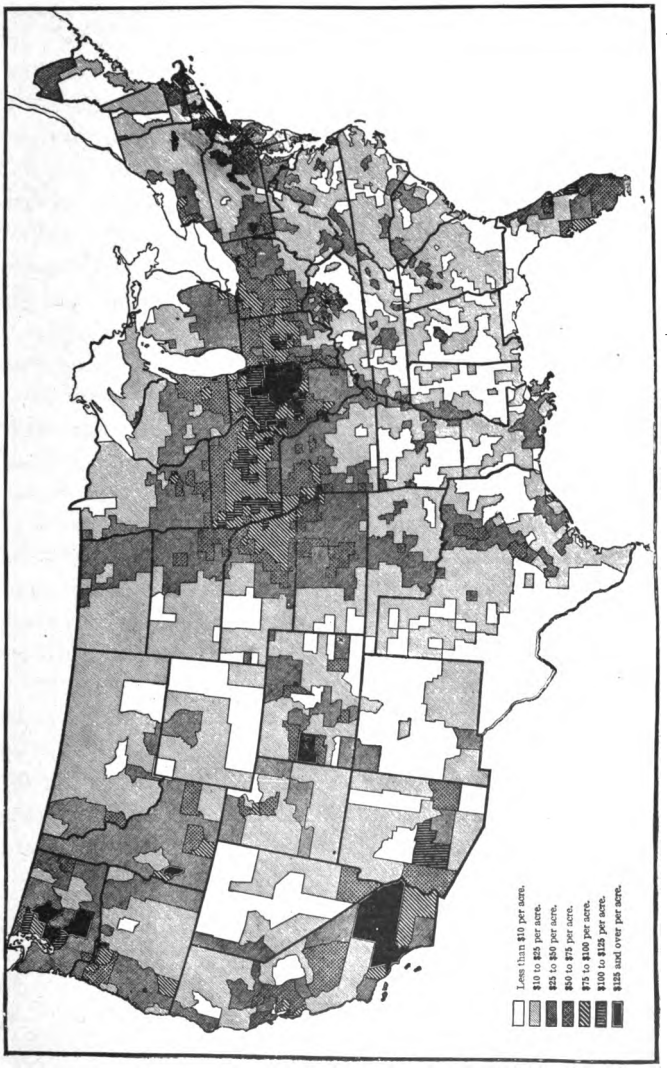
Because of the important place which land holds in production we can well afford to spend the time necessary to make a hurried survey of the natural resources of our own country.

27. Natural Resources of the United States

Agricultural lands. — The most outstanding feature of American industry is the abundance of fertile farm lands. Upon no other country has nature lavished this gift so freely, and no other people have appropriated this gift to better advantage. Here we have a partial explanation of the prosperity of our people and a partial cause of our disregard for thrift. Continental United States embraces an area of approximately three million square miles, or two billion acres. Of this great area practically one-half is under cultivation. The rest is utilized for other industrial purposes, such as in city sites, in forests, and in reservations, or is allowed to remain unappropriated as are the desert lands in the Southwest. The wide expanse of the country north and south accounts in large part for the diversity of crops which we are able to produce. From the North and Northwest comes wheat; from the central Mississippi Valley, corn and oats; from the upper South, tobacco; from the Gulf regions, cotton, rice, and sugar; from California and Florida, subtropical fruits; while the production of hay, vegetables, small fruits, live stock, poultry, milk, and cheese is carried on in all sections of the country. Thus, the variety of the agricultural products of our country is as great as that of all Western Europe with its numerous political units and its relatively large population. In other words, the United States as a single nation possesses agricultural possibilities possessed by no European country.

Forests and mines. — The United States is rich also in forests, despite the prodigal waste of timber that has gone on for more than a century. Oak, pine, cypress, and other kinds of trees are found in abundance, which accounts for the common saying that "America is a land of wooden houses." Every year the forests of the country yield billions of feet of lumber, and

AVERAGE VALUE OF LAND IN FARMS PER ACRE, BY COUNTIES: 1910.

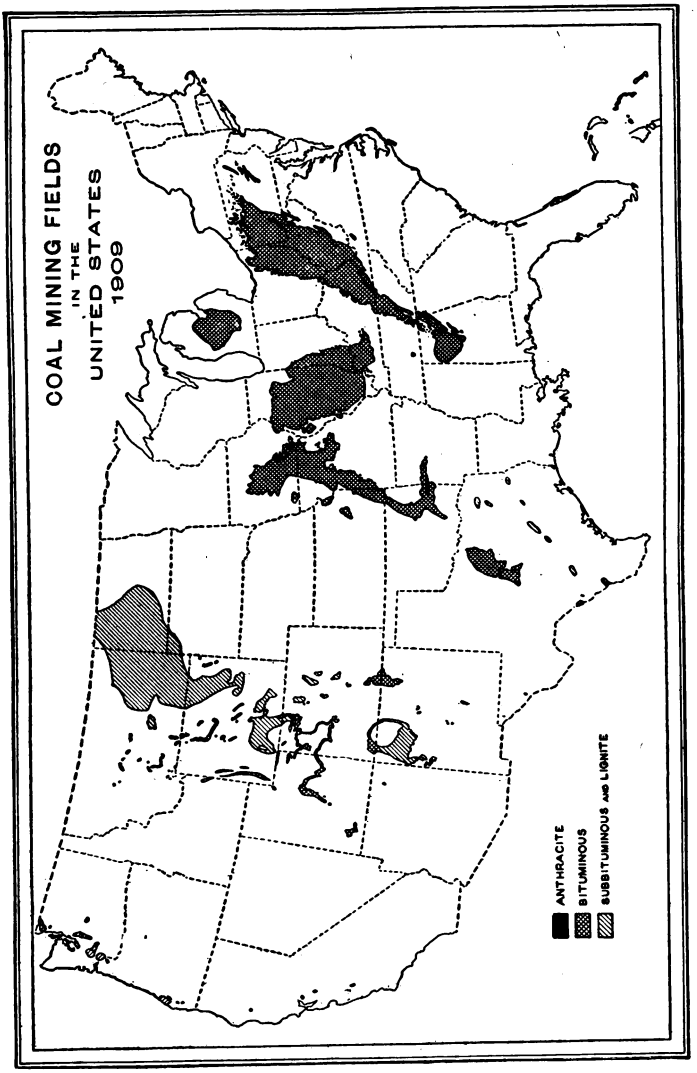

Less than $10 per acre.
$10 to $25 per acre.
$25 to $50 per acre.
$50 to $75 per acre.
$75 to $100 per acre.
$100 to $125 per acre.
$125 and over per acre.

enormous quantities of wood pulp, fuel, mine props, and numerous other products of commerce. As might be supposed, our forests are in danger of depletion. The national government, however, as well as a number of the states, have undertaken seriously within the past few years to prevent forest waste and to see that planting of forest trees is not neglected.

Our mines are also rich, numerous, and widely distributed. The California gold fields were for many years after 1848 the *El Dorado* of the whole world. This industry is still important, though it has been robbed of much of its romance and glamour by the more prosy methods of capitalistic production. Soft coal is found in abundance in many widely separated regions, while hard-coal mining is confined to eastern Pennsylvania. Our deposits of iron ore, which seem to be almost inexhaustible, are also found in many localities. Silver, copper, zinc, and lead add materially to our mineral resources, while petroleum, from which gasoline, oils, and other products of commerce are made, mounts annually in value to hundreds of millions of dollars.

Water power and the fisheries. — The third group of natural resources which we will notice in this connection comprises water power and the fisheries. For many years after steam began to be successfully applied to drive machinery, the waterfalls of our country remained unimportant sources of natural power. The discovery of electrical energy and of methods to apply it to machinery and to transmit it great distances, once more called attention to the desirability of utilizing waterfalls as a source of mechanical power. The successful attempt to harness Niagara Falls has been followed with similar successes in other sections, until it now appears that it is only a question of time until every waterfall in the country will be the seat of electrical generating plants.

In recounting the wealth of our natural resources we are likely to overlook the fisheries, which are the basis of the


COAL MINING FIELDS
IN THE
UNITED STATES
1909
ANTHRACITE
BITUMINOUS
SUBBITUMINOUS AND LIGNITE

prosperity of many localities. The sea fishing of all three coasts is a profitable industry, giving employment to thousands of men and boys and furnishing one of our most important supplies of food. On the Great Lakes, and along the rivers also, fishing is important. Fortunately for the fishing industry, the national government and many of the states have enacted laws designed to prevent waste and depletion. To that end, restrictions are placed as to the time and methods of catching fish; and the stocks of fish are replenished periodically from public hatcheries.

28. The Law of Diminishing Returns

Statement of the law. — The most important economic law under the head of production is known as the "Law of Diminishing Returns." This law applies alike to land, to labor, and to capital. Stated in terms of land in the simplest possible manner, the law is: *As additional units of labor and capital are applied to the utilization of a given piece of land, the increase in the product gained from the land will for a time be greater than the increase in the number of units of labor and capital expended; after which the increase in the product will decline relative to the increase in the number of units of labor and capital.*

Application of the law. — The operation of the law of diminishing returns is best observed in agriculture. Obviously, the product to be gained from a plot of land by one man unaided by machinery of any sort would be relatively small. He could, as the primitive American Indian did before him, scratch the ground with a sharpened stick and cultivate his crops with a shell. Given a strong hoe, it is likely that he could materially increase the quantity of his crop. Thus, step by step with the aid of horses, improved machinery, drain tile, fertilizer, and laborers our farmer would find it possible for a time to increase the product of his land faster than his increase in the application

of labor and capital. He would find also that eventually the product arising from the addition of a unit of labor and capital was less than the product arising from the application of the preceding unit. Then he would have reached the point of *diminishing returns*. Further applications of labor and capital would show a constant decrease in product attributable to the successive units of labor and capital employed. Presently the point of *greatest efficiency* would be reached, which we may say is the point where labor and capital can be applied to the very best advantage on this particular piece of land.

It will aid in understanding this important law if we resort to a graphic illustration. Suppose a farmer has a unit of labor and capital which he applies to a given piece of land with the result that he gets a product of 8, represented in Fig. 7 by the letter *a*. Suppose further that the application of another unit brings an *additional* product of 13 (*b*); of another, 16 (*c*); of another, 18 (*d*); and of another, 17 (*e*). Clearly, the fifth unit of labor and capital produces less than does the fourth unit. Hence, the *point of diminishing returns* is between these two units, at E. Additional units of labor and capital *may* be applied, however, before the point of greatest efficiency is reached. According to our assumption, the fifth unit of labor and capital will yield a product of 17 (*e*), which is greater than can be had on new land similar to the piece of land which we have under consideration, for the product (17) exceeds the average product of the preceding units $\left(\frac{8 + 13 + 16 + 18}{4} = 13\frac{3}{4}\right)$.

Also, our farmer will find it advantageous to apply a sixth unit of labor and capital, which, we have assumed, will yield a product of 15 (*f*), for this is greater than the average yield of the five units already applied. The total product of the six units is 87 (8 + 13 + 16 + 18 + 17 + 15), or an average of $14\frac{1}{2}$ (87 ÷ 6). *If similar new land is available* he cannot

afford to apply a seventh unit of labor and capital which yields anything less than $14\frac{1}{2}$. He will not apply the seventh unit, which yields a product of but 13 (*g*). The point of *greatest efficiency*, then, is between units 6 and 7, designated in Fig. 7 as G. But the point of diminishing returns and the point of greatest efficiency may coincide. Suppose the fifth and sixth units of labor and capital yield a product of 13 and 11

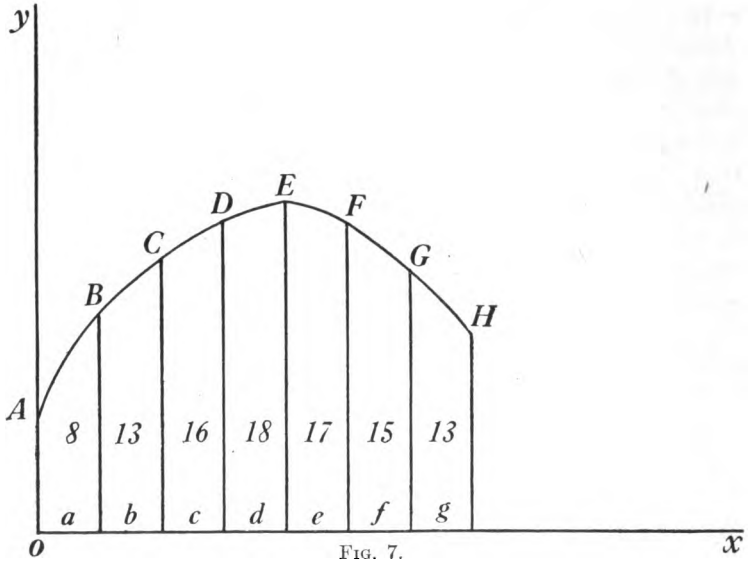


FIG. 7.

instead of 17 and 15. In that case the application of the fifth unit would be accompanied by a decline in product relative not only to the fourth unit but also to the average yield of the four already applied.

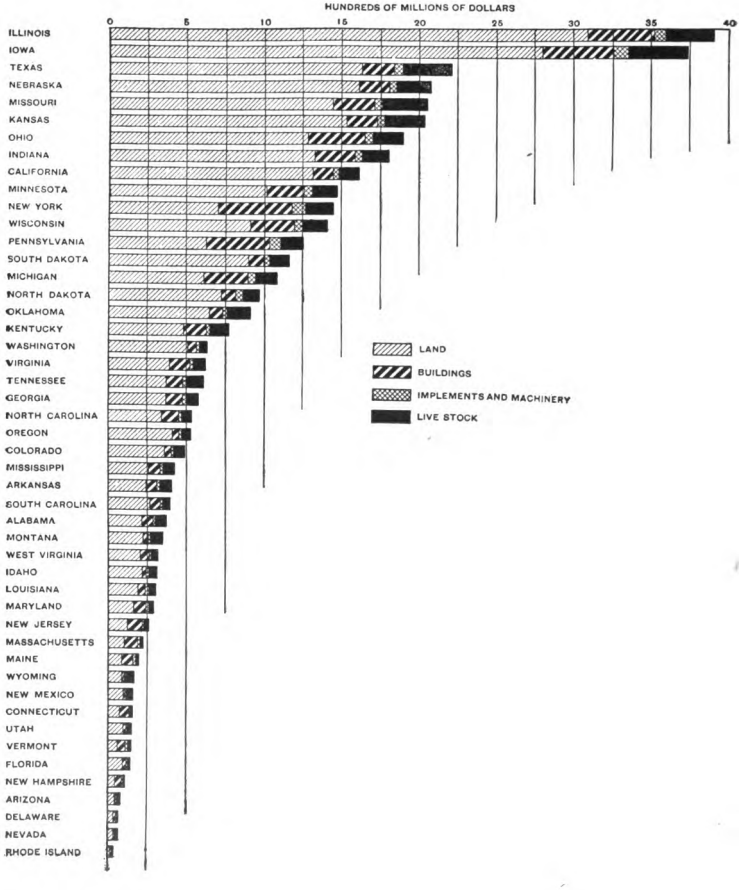
Intensive and extensive margins of cultivation. — We may now notice in an elementary way the notions associated with intensive and extensive margins of land cultivation. When our farmer has reached the point of greatest efficiency (G in

Fig. 7), he has, provided the price for his product justifies further expenditures, two possible courses before him: he may apply additional units of labor and capital on the piece of land on which he has already expended 6 units; or he may apply these additional units to another piece of land. What is likely to be his action? If there is more land similar in every way to the piece he is already cultivating — which is unlikely — he will take up new land. If, on the other hand, the only land available is inferior to the piece which he is already cultivating, he will farm that piece more intensively; just how much more intensively will depend on the relative inferiority of the available land compared to the piece already under cultivation.

The problems connected with the law of diminishing returns, and with intensive and extensive margins of cultivation, have a practical significance in agriculture. If it were not for the operation of the law of diminishing returns, all the wheat which the world needs could be grown on a relatively small area — on a city lot, even in a common flowerpot. Every farmer knows that it is not profitable beyond a certain point in cultivation to hire more laborers, to buy more machinery, or to lay more tile; and the higher the wage level, the higher the prices of machinery and materials, and the greater the abundance of good land, the quicker he decides to cease adding capital and labor. Here is the explanation of the extensive character of American agriculture. American travelers in European countries, returning home enthusiastic over the intensive methods of cultivation they find there, often criticize the farmers here for what appear to them to be careless methods of agriculture. The fact is that the farmer himself has a fairly good idea of the location of the point of diminishing returns and the point of greatest efficiency, even though he may never have heard of these terms. In other words, he has found by experience and observation that intensive agriculture is not as

profitable in the United States as in older countries, largely because of the high wage level and the abundance of unoccupied lands.

VALUE OF DIFFERENT KINDS OF FARM PROPERTY IN THE UNITED STATES: 1910.



Application of the law to other kinds of land. — The law of diminishing returns also operates in the use of other forms of land, such as mines and building sites. In mining, as well as in agriculture, there is a point of diminishing returns. Likewise, there are intensive and extensive margins of operation. Every mine owner knows that successive additions of miners and machinery will for a time increase the output of ore at an ever-increasing rate of speed. He knows also that a point will be reached eventually where this rate begins to decline.

Owners of building sites, like the owners of farms and mines, face the problem of determining just how much labor and capital they should apply to their land. Obviously, one would apply more on a piece of land in lower New York City than on an equal-sized piece of land in an Iowa county-seat town. But how much more? Shall the building have one floor, or shall it be a skyscraper? The piece of land will support one as easily as the other. Moreover, we may say, speaking roughly, that the same foundation and the same roof will suffice whatever the height of the building. Here, as it was in the case of agricultural land, the guide is the relation of the value of the labor and capital expended to the value of the product. The addition of a second floor to a store building in small towns, and a third or fourth in moderate-sized cities, usually increases the rate of returns to the land. There will come a point, however, when the return from another floor will show a decline, which indicates that the point of diminishing returns was reached with the addition of the *preceding* floor.

It will readily be seen that the application of the law of diminishing returns to building sites is intensely practical not only in the matter of stores and shops, but also in the matter of residences. All of us have seen costly houses on cheap lots; and, conversely, cheap houses occupying costly sites. In the first case the use of the land was intensive; in the second, exten-

sive. The importance of these truths will become more evident when we take up the question of rent.

EXERCISES AND PROBLEMS

A

1. Define "land."
2. How does land differ from natural resources?
3. What are the chief factors in determining the productivity of farm land?
4. Does the improvement of rural roads increase the productivity of farm lands through which they extend? Discuss.
5. Why are some store sites more desirable than others?
6. Why is such a large portion of the United States unimproved?
7. Why do farmers resort to the rotation of crops?
8. Why are store buildings usually taller in cities than in towns or villages?
9. Is there any relation between the value of a residence site and the value of its improvement? Explain.
10. Why would it not be profitable for every farmer to own and operate a farm tractor?
11. How many clerks should a merchant employ?
12. How large should his stock of goods be?
13. Are there any limits to the size of the building he can profitably use? Explain.
14. What considerations might cause him to change sites? the size of his stock of goods? the number of employees?

B

1. Mention the most important natural resources in your community.
2. What efforts are being made in your community to conserve natural resources?
3. Locate on a map the more important regions devoted to the production of wheat, corn, cotton, tobacco, rice, sugar cane, coal, petroleum, and precious metals.
4. What kinds of crops are best fitted for *intensive* farming? for *extensive* farming? Give five examples of each, preferably from your own neighborhood.
5. Discuss the productiveness of various store "sites," and try to determine why differences exist.

6. Locate the point of diminishing returns under conditions assumed in the erection of an office building as follows:

Cost of site . . .	$10,000	Total net annual rent	*Nothing*
Cost of first floor .	8,000	Total net annual rent	$1,400
Cost of second floor	5,000	Total net annual rent	1,900
Cost of third floor .	4,000	Total net annual rent	2,350
Cost of fourth floor	4,000	Total net annual rent	2,700
Cost of roof . . .	1,000	Total net annual rent	2,700

7. Draw a diagram illustrating the law of diminishing returns in some industry with which you are familiar.

C

1. American farmers are constantly being criticized because they do not produce as much per acre as English farmers.
   a. Is this criticism just?
   b. If so, why do not American farmers operate more intensively?
   c. Are there limits to intensive farming? Explain.
2. "The opening of the Erie Canal affected both intensive and extensive agriculture in the United States."
   a. How was the average size of farms affected?
   b. In what ways was the New England farmer affected?
   c. What was the effect on farming methods in Ohio?
   d. Did the kinds of crops grown undergo any changes? Explain.
3. A coal operator was requested by a government official during the summer of 1917 to state how much it cost to mine a ton of bituminous coal. His answer was: "Show me the mine." Why could he not answer more satisfactorily?
4. "Iowa and Central Illinois are the heart of the best corn-producing region in the world." Comment.

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CHAPTER X

CAPITAL AS A FACTOR IN PRODUCTION

29. Source of Capital

The surplus above subsistence. — According to our definition capital is the product of past industry used to further production. Just when and how the first capital appeared it is impossible to say, difficult even to imagine. Primitive man working with his hands alone must have found it difficult to secure anything over and above bare subsistence; for even under the wildest condition we can hardly imagine that food, clothing, and shelter could ordinarily be procured in adequate amounts without labor. At some point in his development, however, we know that he began to create capital. Perhaps it was a bow and arrow he made, or a canoe, or a snare for small game, or a fish net. But where did he find the time for creating this capital? Perhaps a storm brought to the shore a surplus supply of fish, or an accident placed in his hands an extra deer. In either case he would find it possible to abstain a few days from the labor of getting food to sustain life. It is just as likely, however, that our primitive man, feeling instinctively the long-run gain to be had from the use of capital in production, consciously decreased his volume of consumption, even going hungry. Thus, by spending a part of each day in fashioning a crude tool or weapon, instead of spending his whole time in hunting or fishing, he was able eventually to create capital. We, his descendants, must do the same thing today if capital is to be increased or even conserved, and the first step to that end is to be able to curb desires and appetite.

Saving. — Merely to curb desires and appetite in one direction is not enough if we permit them to run rife in other directions. Our primitive man when he discovered the surplus fish, might very well have refrained entirely from labor while they lasted, spending his time in sleep or in sight-seeing. We can even imagine his skimping himself in the matter of meat in order to find time to gather berries or nuts for food. Clearly, in neither case would he have created any capital. Nor should we under similar circumstances. A curtailment of expenditures in one direction may or may not contribute to an increase of capital. We must not, if we are to assist in the creation of capital, permit economy in the use of some goods to be entirely nullified by extravagances in the use of other goods. Consequently, the *second* step toward the creation of capital is *that income must exceed outgo.*

Investing. — The surplus of income over outgo must be not only saved but also invested. If, after completing the canoe, our primitive man had hidden it away in some cave, obviously it would not have been capital; for one of the characteristics of capital is its use to further production. Likewise, the hoardings of a miser do not increase capital. In fact they tend to decrease it. To make savings effective, therefore, in the creation of capital, the saver must invest them directly in his own business, or in stocks or bonds, or indirectly through such institutions as banks and building and loan associations.

The source of capital, we are now prepared to say, lies three steps from the capital itself. *First*, the income must be above the line of bare subsistence; *second*, income must exceed outgo; *third*, the surplus must be invested.

The significance of each of these steps becomes apparent when we view society as a whole. Everywhere in this country there are families with incomes that do not permit of consumption above the line of subsistence. Consequently, they are

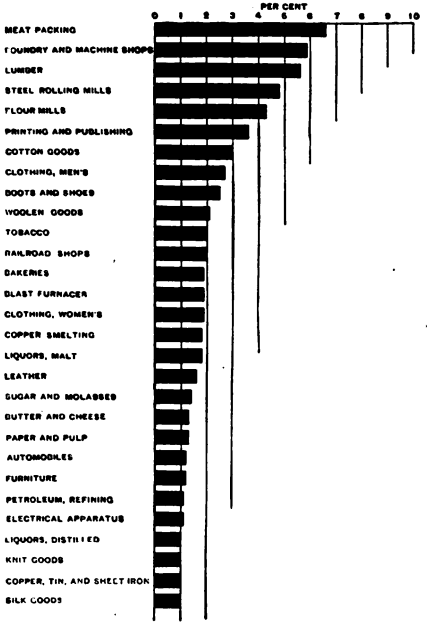
unable even to take the first step toward the creation of capital, much less to go the whole journey. Then there are millions of families and individuals who have something left over after providing necessaries, but who have never learned to save. They could, if their imagination and will power were strong enough, assist in the creation of capital. Since they do not, their influence in this respect is little if any greater than their less fortunate neighbors. Fortunately for the progress of society, there are other millions who take the second step toward the creation of capital by spending less than they earn — by saving. Most of these, experience and observation teach us, do not hoard their savings, but place them where they can be utilized by productive industry. They, and they alone, are responsible, *under the present organization of society*, for the creation and accumulation of capital.

30. Nature of Capitalistic Production

Advantages of indirect production. — Production without the aid of capital, which in this connection we will call *direct* production, is primitive in its very nature. The early pioneer, in Iowa let us suppose, quenched his thirst for the first few weeks by lying prone to drink from a natural spring. Obviously, under these conditions, he found it necessary to visit the spring each time he felt the need of a drink. This was direct production in its simplest form. Suppose, to continue the illustration, he spent an hour fashioning some sort of vessel from bark or clay that would contain enough water for the day, and that thereby he saved ten of the twenty minutes which he had formerly consumed daily in walking to and from the spring. Suppose further that by the expenditure of one day's labor he contrived a system of pipes made from wild cane which would carry a continuous flow of water to his cabin door, and which would relieve him of any further labor in getting water from the

spring. Each step shows the advantage of indirect production. In the first, the hour's labor was made good in six days; in the second, in a few months at most. So it is throughout all the productive processes. The time spent in fashioning tools and machines ordinarily yields an amount of goods in excess of the amount which would have been produced had it been spent in direct production.

PERCENTAGE OF TOTAL VALUE OF PRODUCTS FOR LEADING INDUSTRIES: 1909.



It is necessary to qualify our conclusions with the word "ordinarily," for it is easily conceivable that there are limits to the advantages of indirect production. If our Iowa pioneer had spent days in embellishing his water pipe with shells and beads, there is no reason to believe that it would have served its purpose any better. Furthermore, whether or not the indirect method of production of any particular good holds an advantage over more direct methods, depends in part on the availability of labor. In the oriental countries, where labor is plentiful and cheap, it is often more advantageous in transporting merchandise to employ men than automobile trucks.

The place of capital in modern industry. — Since the indirect, or capitalistic, method of production is ordinarily more

advantageous than the direct method, it characterizes, as we might expect, modern industry, with its enormous capital, its highly developed division of labor, and its complicated tools and machinery. Few business men would care to attempt to carry on production of any kind by direct methods. One of their chief concerns is to control sufficient capital for their business. Even farming, which we are still likely to regard as being carried on more or less directly, has felt the need of more and more capital to be expended for fertilizers, machinery, and buildings. Indirect production has had its highest development in manufactures. In another connection we have seen how, under conditions of excessively large production, complicated and costly machinery has gradually displaced many of the simpler direct processes. Such displacements do not occur by accident, and would not occur at all if capitalistic production in these particular cases were not more efficient than direct methods. After all, the final test is efficiency and profitableness; for the producer, seeking his own economic advantages, will employ those methods which appear to him to be the best. For that reason, capital has come to dominate modern industry; and we may expect it to enjoy an increasing dominance until the limits of indirect productive methods are reached.

31. Different Kinds of Capital

Fixed and circulating capital. — Capital may be classified in a variety of ways, two of which concern us here: fixed and circulating, in which *time* is the important element; free and specialized, in which the *use element* is the chief factor.

It is a well-known fact, which can easily be verified by observation, that some forms of capital — that is, certain kinds of capital goods — are consumed more quickly than other forms. A piece of coal, for example, can be used but once. In other words, the only way to consume coal is to destroy it at a single

operation. At the other extreme are capital goods which can be used almost an infinite number of times before they are consumed. A common carpenter's handsaw has been known to survive fifty years' continual use. Some machines, too, last for years, successfully withstanding the wear and tear that comes from daily operation. To the coal we apply the term "*circulating* capital"; to the handsaw or machine we apply the term "*fixed* capital." It must be kept in mind, however, that both terms are relative, for the highest form of circulating capital is fixed for at least one operation, while no capital is so perfectly fixed as to last forever.

The replacement fund. — The length of time and the number of operations that any piece of capital good lasts are of prime importance relative to its *replacement fund*, which is the capital that must be accumulated to provide for wear and tear. Let us suppose that a factory equipped with ten machines consumes five tons of coal daily. At the close of the day the five tons of coal, having been consumed, will need to be entirely replaced. The machines, on the other hand, possessing a relatively high degree of fixity, are ready for the next day's work. Thus, day after day the coal supply is replenished, while the machines with only minor repairs may last for years. Each day the enterpriser finds it necessary to set aside a replacement fund large enough to buy five tons of coal, while the replacement fund necessary to cover the wear and tear of each machine may be but a few cents. If we should view the whole factory, we would find that every piece of equipment and bit of raw material consumed in making finished products are more or less fixed in their nature and more or less circulating, some being consumed with a single operation, some lasting for years, but all provided for in the replacement fund.

It is well to remember in this connection that it is the replacement fund which permits the shifting of capital from one group

of industries to another. We have already noticed that the American industrial revolution was characterized by a change from commerce to manufactures. Obviously, the owners of ships could not utilize such forms of capital goods as hulks, sails, masts, and anchors in the making of cloth. They did, however, have available replacement funds which they had accumulated in the form of money to replace the vessels as they became unseaworthy. Thus, the owner of an old ship that was almost worn out had a relatively large replacement fund, while at the other extreme was the owner whose vessel had not even yet made its maiden voyage. The enterpriser, therefore, has, or ought to have, a replacement fund at all times, its relative size depending, among other things, on the condition of his equipment — that is, as business men say, on the state of repairs.

Free and specialized capital. — Here again, as in the case of fixed and circulating capital, we are compelled to deal with relative terms. No capital is entirely free, and only on rare occasions do we find capital so highly specialized as to be entirely worthless for any other use. Free capital may be defined as capital which serves a variety of uses; specialized capital, as capital which serves but few uses. For purposes of illustration take two common farming implements. The plow is used in preparing the ground for all kinds of crops, while the hay rake is practically worthless in gathering any other crop. For the sake of convenience of expression we call one free capital, the other specialized capital. Sometimes, however, capital is said to be free when it can be used for entirely different purposes. Coal, for example, may be used to generate steam, or to heat a building, while it is improbable that a second use could be found for a nutmeg grater.

There is a close relation between free and specialized capital on the one hand, and the rate of interest on the other. Free capital, as a general rule, earns a lower interest rate than does

specialized capital, simply because the risk of losing the investment is less. Suppose two men contemplate the expenditure of equal amounts of money in two buildings, one a store building adaptable to almost any kind of merchandising, the other a moving-picture building with highly decorated interior, with a stage, and with an elevated floor. Plainly the risk involved, other things being equal, in getting tenants would be less in the case of the first building than in the case of the second. The first could be utilized in various ways; the second, unless extensive alterations are made, is likely to prove useless for any purpose other than moving-pictures. Knowledge of these facts causes investors to demand a higher interest rate in one case than in the other, and in the long run they secure their demands.

Gold is not a free capital good. — Because of its universal acceptability gold is often mistakenly spoken of as free capital. Such is not the case, however, in the sense in which we have just used the word "free." Aside from its utilization in jewelry and watch cases and in dentistry we seldom in our everyday experiences see gold used as a capital good; compared with iron or copper the number of ways in which it can be utilized is small. For that reason it is specialized rather than free. It has, however, a high degree of exchangeability, since, as we have seen, it flows freely from hand to hand because it is universally desired.

Individual and social capital. — In our ordinary thinking we seldom go beyond the notion of individual capital — that is, capital possessed and directed by individuals. Society, also, has considerable capital which is of no small amount and importance. Factories and department stores install automatic sprinklers, which we agree at once is capital. Sprinklers lessen the fire hazard. So does the city fire department with its heavy investment in buildings, trucks, ladders, and other equip-

ment. Both serve the same purpose; both represent capital investment, one by individuals, the other by society. In extending this notion we find, for example, that government buildings with their furnishings and equipment parallel individual capital investments designed to furnish the same or similar services, and as such they are capital.

EXERCISES AND PROBLEMS

A

1. What was the origin of capital?
2. Name the three steps necessary to create capital.
3. Are any individuals or groups unable to take these steps? Explain.
4. Which is the more useful member of society, a miser or a spendthrift?
5. Why is capitalistic production said to be roundabout or indirect?
6. What are the advantages of indirect production over direct production?
7. How does the replacement fund give mobility to capital?
8. Explain how a carpenter's hammer replaces itself.
9. What has become of the large amount of capital formerly used in the buggy and carriage industry?
10. Is any capital completely fixed? Explain.
11. Where should the line be drawn between fixed and circulating capital? between free and specialized capital?
12. Why should specialized capital yield a larger income than free capital?
13. Just why is gold a highly specialized form of capital?
14. Name some forms of social wealth.

B

1. Call to mind persons in your community who contribute to the supply of capital.
   a. Are all of them relatively well-to-do?
   b. Which, if any, appear to sacrifice unduly in order to save?
   c. Which are *normally* thrifty?
   d. Have any adopted definite plans for saving?
   e. What advice has any of them to offer in the matter of saving?

2. Imagine, if you can, a general return to direct methods of production.
   a. How would civilization be affected?
   b. Would the volume of production be greater or smaller? Explain.
   c. Would individuals and groups be more or less self-sufficing? Explain.
   d. Would people have more or less leisure time? Why?
   e. How would such a change affect public education?
   f. Name some industries that would be likely to suffer the most.

3. Many tasks, such as digging ditches, cleaning streets, and carrying brick and mortar, are usually performed by direct methods.
   a. Could capitalistic methods be employed? How?
   b. Why are they not usually employed?
   c. Under what conditions are they sometimes employed?
   d. Does there appear to be any relation between capitalistic methods and the law of diminishing returns? Explain.

4. Classify the capital in some industry with which you are familiar into free, specialized, fixed, and circulating.

5. Suppose a certain individual invests $10,000 in a store site and building; also an equal amount in another site and building utilized by the state as an armory for a company of militia. Which should normally earn the larger return? Why?

6. Prepare a list of various forms of social capital. Show how each item in the list lessens the need for greater individual wealth.

C

1. "The corporative form of industry has been a big factor in the saving and investing of capital." Explain with some detail how this is true.

2. Socialists usually claim that labor is the source of all wealth.
   a. Can wealth be created without labor? How?
   b. Can capital create wealth without the assistance of labor? How?
   c. How would the destruction of all wealth affect the efficiency of labor?

3. "With the extension of capitalistic methods of production the proportion of fixed and specialized capital goods shows a tendency to increase."

a. Is this statement true?
b. Why is it true?
c. Why, or why not, is this proportion likely to increase?
d. Under what conditions might it decrease?

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CHAPTER XI

COMPETITION *VERSUS* MONOPOLY

32. Impetus of Competition

The doctrine of *laissez faire*. — Business men and public officials for centuries held the view that business could best be conducted if minutely regulated by the government. To that end the various nations granted monopolies of all sorts, regulated the relation between masters and their workmen, and restricted the exportation of money and raw products to foreign lands. This was the period of *mercantilism* — that is, a period of state regulation of business. There were some leaders, however, who believed that state interference was more detrimental than helpful, and that better industrial results could be attained by permitting each individual to pursue his own economic advantage. The first widely-read expression of this new doctrine, the doctrine of *laissez faire*, was given to the world by Adam Smith, in 1776, in an epoch-making work entitled the *Wealth of Nations*.

Since that time these two conflicting views have contested for supremacy in the minds of men. Mercantilism — state regulation of business — has stubbornly given way to its younger rival, though it still lingers in such form as the protective tariff; and it would not be at all surprising if it should regain its second youth. We may say, however, that business in general in the United States is characterized by the principle of *laissez faire*, or, to use a more common expression, *competition*. Here each business man is permitted, with a minimum of state

FAC-SIMILE EXTRACT FROM SMITH'S WEALTH OF NATIONS.

AN

INQUIRY INTO THE NATURE AND CAUSES

OF THE

WEALTH OF NATIONS.

BOOK I.

CHAPTER XI.

Of the Rent of Land.

RENT, considered as the price paid for the use of land, is naturally the highest which the tenant can afford to pay in the actual circumstances of the land. In adjusting the terms of the lease, the landlord endeavours to leave him no greater share of the produce than what is sufficient to keep up the stock from which he furnishes the seed, pays the labour, and purchases and maintains the cattle, and other instruments of husbandry, together with the ordinary profits of farming stock in the neighbourhood. This is evidently the smallest share with which the tenant can content himself without being a loser, and the landlord seldom means to leave him any more. Whatever part of the produce, or, what is the same thing, whatever part of its price, is over and above

interference, to decide his own policy, to buy and sell to the best advantage, and to conduct his business as he thinks advisable. Here the state makes no effort to regulate his business activities so long as public welfare is not endangered. Under normal conditions it has no concern with the details of his business, with the source of his raw materials, with the volume of his output, or with the prices of his product. Consequently, any one in the United States can move about at his convenience, seek employment anywhere, and engage in almost any business for which he is equipped.

Competition and improvement. — The chief economic argument for competition is that it serves as the basis of business improvement and business development. Who has not heard the common saying, "Competition is the life of trade"? Spurred on by competitors the business man seeks better sources of raw materials, better methods in production, and better markets; which in almost every case means higher quality and lower prices. Under the pressure of competition he substitutes new and better methods for old ones, and if he is to succeed, he must not only be alert to the improvements of his competitors, but also he must on his own initiative institute improvements of his own.

The business world is literally alive with industrial improvement. Large manufacturers maintain expensive laboratories where their competitors' products as well as their own are carefully tested for excellence; where experiments are carried on with the single purpose of improvement. Railroads, too, are alive to any change that will improve their service. Competing lines fight for supremacy in the matter of speed, of comfort, and of safety. They employ high-priced engineers to study the pulling power of engines, the effect of speed on rails and roadbed, and the advantages to be gained by straightening tracks and cutting down grades. They experiment with different kinds of

fuel, and with different makes of engines and cars. Even among farmers competition leads to improvement in the quality of seed, in cultivation, in stock-raising, in harvesting, and in a variety of other ways. For most of us the best examples of the influence of competition on improvement are found in the retail trade. One grocer installs a large sanitary refrigerator, another replaces his old horse-driven delivery wagons with automobile trucks, while a third makes arrangements to permit his customers to wait on themselves as far as possible. At the bottom of each change is the desire to get more business. The first has an advantage in handling perishable goods, the second cuts the expense of delivery, while the third is able to reduce his number of clerks. In the end many other grocers, unwilling to be bested by competitors, adopt these innovations. Thus in its endless round industrial improvement goes on its way stimulated by the force of competition.

Wastes of competition. — Competitive methods often show a loss, however, which society should, and will in time, eliminate. Spurred on by a desire to increase trade, competitors sometimes uselessly duplicate plants and equipments, with the result that society must pay more for their particular goods than would otherwise be the case. Delivery of milk in cities is a common example of this waste. Not infrequently as many as a half dozen milk drivers visit the same apartment house in the course of the early morning hours, the combined service being little greater than that which one driver could have rendered in the same time. Recent investigations of the conditions surrounding the delivery of milk in a large Middle Western city disclose the interesting fact that the cost of delivery from city milk stations to the homes is greater than the combined cost of producing the milk and shipping it to the city. We may see similar wastes in a duplication of small stores, each with its staff of clerks and its delivery system working but part time.

Society has already made much progress in the matter of waste prevention, by facing squarely the fact that some industries by their very nature are monopolistic in character and not competitive. As a result few cities have duplicate water stations, electric lighting systems, or artificial gas plants. Usually also one street railway system suffices. Competition between telephone systems still persists in some localities. Obviously, the duplication of an electric lighting system would be a social waste, especially if some means other than competition can be made an effective regulator of service and price. Such means have been found in positive legislation in which the benefits of competition are gained without the loss arising from duplication of plants, equipment, and labor force.

33. The Law of Monopoly Price

Getting the largest net return. — The feeling prevails that a monopolist will always sell his goods at the highest price. On the contrary, he sells them at that price which brings him the largest *net* return, whether that price be high or low. He is concerned not only in price, but also in the number of units sold. In pursuing his economic advantage, therefore, he would set the price with due regard for demand; for, as we have already learned, an increase in price lowers demand while a decrease causes demand to rise.

The operation of the law of monopoly price is best observed in connection with goods which have an elastic demand; and which are produced under conditions of decreasing costs — that is, under conditions in which the unit cost of production decreases as the number of units produced is increased. Assuming, for illustrative purposes, that the manufacturer of a certain brand of toilet soap is a monopolist, we can work out concretely his problem of fixing the price.

No. of Cakes Sold	Cost per Cake	Gross Cost	Selling Price per Cake	Gross Receipts	Net Profits
20,000	20¢	$ 4,000	80¢	$ 16,000	$12,000
50,000	18¢	9,000	50¢	25,000	16,000
100,000	15¢	15,000	40¢	40,000	25,000
300,000	14¢	42,000	25¢	75,000	33,000
1,000,000	10¢	100,000	15¢	150,000	50,000
3,000,000	8¢	240,000	10¢	300,000	60,000
5,000,000	7¢	350,000	8¢	400,000	50,000
8,000,000	6½¢	520,000	6¢	480,000	40,000 (loss)

An examination of these figures shows that our soap monopolist would fix the selling price at 10 cents, not because that was the highest price he could get nor because he could sell the largest number of cakes at that price, but rather because at that price he can reap the greatest reward.

A second consideration which the monopolist must keep clearly in mind is that his monopoly consists in controlling the supply and *not* the demand — that is, that he has no control over demand except through price. Consequently, a monopolist must take care in fixing the price of his good, for if he places it too high his entire output will not be demanded; if too low, he loses profit. Occasionally, a monopoly, like the South African Diamond Company, is so secure in its dominating position as to be able to withhold, if prices are too low, portions of its products from the market. Such a practice, however, would be impossible among most monopolists, for the simple reason that competition might arise or the goods withheld might decay. We may conclude, then, that the mere fact that a certain good is in the hands of a monopolist is not conclusive proof, as most people think, that the good will command a higher price than if in the hands of numerous competitors.

Supplying different demands. — It often happens that a monopolist can, by changing slightly the character of his product, supply different demands at different prices. Recurring to our soap manufacturer, let us suppose that instead of making only one kind, as we have assumed, he makes five kinds differing only in shape, color, or scent. It is entirely probable that he could sell his output at five different prices; those most highly scented, let us say, at the highest price, and so on down until the lowest price is reached with the unscented cakes. More familiar illustrations of this principle are found in the publication of certain kinds of books. Ordinarily, the earlier editions of books of fiction are sold at high prices. Later so-called popular editions are issued at half price or even less. The reading material is exactly the same, and occasionally no great change is made in the quality of paper or binding. Publishers know that there is a demand for the book at the standard price. They know also that many readers do not have *demands* at that price. Hence they supply each demand successively, beginning at the top, unless, as is sometimes the case, they make a show of supplying several demands at once by issuing different editions that *appear* to be very much unlike in printing and binding. Any peddler knows that in many cases the only way to sell an article at a discount to one housewife without losing the custom of her neighbors is to mar it in some manner so as to decrease its *apparent* utility. To use a common business expression, " one of the tricks of the trade " which the monopolist must learn is to be able to classify rather accurately the different demands for his product and to meet these demands.

34. Limitations on Monopolists

Dangers from competition. — It would be incorrect to gain an impression from what has just been said that the monopolist has nothing to fear, or that he can always fix a price that will

bring him the largest net reward irrespective of outside influences. Three limitations tend to keep the monopolist from going beyond reasonable bounds in dealing with the public: (1) competition, (2) substitution, (3) legal interference.

No monopolist is ever free from the dangers of competition, and the more excessive his exactions the greater the danger. In a highly developed industrial country like the United States, capable business men are constantly on the alert to engage in profitable undertakings. They quickly sense the source of high returns, and no risk is too great for them to take if the promised reward is sufficiently large. The history of American industry furnishes numerous examples of successful attempts on the part of competing enterprisers to secure trade from monopolies; and oftentimes these struggles between giants have developed into bitter trade wars featured by excessive price-cutting. At one time the sugar trust found its way blocked by a combination of independent refineries; the history of the Standard Oil Company is characterized by its struggles with independent rivals; while the steel trust has found effective competition at the hands of the Bethlehem Steel Company. No monopoly, whatever its financial strength and prestige may be, is justified in feeling its position to be secure against successful competition, for a new invention or some other unforeseen occurrence may give a watchful rival an opportunity to secure a portion of its business.

Dangers from substitution. — Monopolists must also take into account the power of consumers to substitute one good for another. Usually as the price of a good rises, those consumers who are on or near the margin cast about for a substitute, since it is but a question of time, if prices continue upward, until their demand for that particular good will be nothing more than a desire; that is, their demand will have lost its effectiveness. Examples of the substitution of one good for another because of

a rise in price are numerous and easily found, particularly in the matter of food and clothing. Who has not seen a substitute for butter, for eggs, for leather, or for furs? The first year of the Great War taught Americans more about substitutes than they had ever known before. Until that time millions of people were scarcely more than on speaking terms with bread made of corn meal, few knew the possibility of molasses for sweetening purposes, while scarcely one had ever dreamed that honey could be made from milk. Aside from government requirement, the chief cause for these substitutions was high prices, and here, as is always the case, " necessity was the mother of invention."

Substitution and competition as checks on monopolies cannot be entirely divorced. Independent enterprisers are eager, not only to attack the monopolist directly in his own field, but also to attack him indirectly by offering his customers substitutes. Thus, cement manufacturers, in so ar as their product is a substitute for iron and steel, compete just as truly with the steel trust as does the Bethlehem company; and they in turn must meet the competition of manufacturers of artificial plaster board. The methods adopted by manufacturers of substitute goods to push their product are significant. The maker of an egg substitute, for example, is not content to declare that his product is equal in every respect to fresh eggs. He goes further, by placing in the hands of housewives all sorts of cooking recipes in which the egg substitute can be used to advantage.

Dangers from government regulation. — A monopolist still has cause to worry even though he be secure from competitors and his product be free from the competition of substitutes. Despite the doctrine of *laissez faire*, society through government sets limits beyond which monopoly may not go. It undertakes, when all other methods have failed, to curb exorbitant rewards and unfair practices. In fact, as we have already seen, the

people of the United States have firmly concluded that there is no possibility of some industries being regulated either by competition or by substitution. Accordingly, in these cases the people have turned to government regulation. For many years the opinion prevailed in the United States that the best way to control a railroad was to encourage the building of competing lines. In time it was seen that such a plan was not only inadequate but also undesirable. Then it was proposed that the government should provide, not competing railroads, but substitute transportation lines in the form of canals. This too was put aside as impracticable. Then society met the issue squarely by declaring that the government alone possessed the power to compel the railroads of the country to conduct their business so as to furnish efficient and reasonably priced service.

While the regulation of railroads is the most outstanding example of the government's power in this respect, it has been effectively exerted against the trusts. And there is no reason to believe, should occasion arise, that the federal government would hesitate to exert its authority against any other monopolies. Because of past experiences and future possibilities, monopolists are wise to conduct their business somewhere near a competitive basis.

Concealment of monopolistic returns. — As we might expect, the monopolist fearful of attack from these directions often attempts to hide excessive returns. He may pay himself, and even to relatives, salaries out of all proportion to the market value of their abilities. Or, as is more often the case, he can inflate the capital stock of his business in order that it may appear to be earning but a nominal return, whereas the return based on the actual capital investment may be excessive. Or again he may organize dummy corporations to which he pays large amounts of money for some trifling service. Whatever method he may employ, the end in view is the same: the

concealment of excessive returns which might tempt competitors or the government to step in and force a reduction of prices.

EXERCISES AND PROBLEMS

A

1. What is the difference between *laissez faire* and mercantilism?
2. Why should the government desire to regulate industry?
3. Who was Adam Smith?
4. Why is he often referred to as the "father of economics"?
5. What is the relation between competition and industrial improvement?
6. What are some of the wastes of competition?
7. State the law of monopoly price.
8. Why is the monopolist primarily concerned with the largest *net* return?
9. What limitations are placed on monopoly price?
10. How does a monopoly come into existence?
11. Is monopoly synonymous with big business?
12. Which monopolist would have the most power in fixing price, and why:
    a. The one dealing in necessities?
    b. The one dealing in luxuries?

B

1. Notice carefully how several competing retailers in the same line carry on their businesses.
    a. Which has the best site?
    b. Which has the largest stock of goods?
    c. Which has the most attractive window displays?
    d. Which has the most efficient delivery system?
    e. Which advertises the most extensively?
    f. Why does not some one of them combine all these good points in his business?
    g. What would be the result if he did so?
2. Observe the wastes of competition in retailing arising from duplicated efforts in the matter of delivery, advertising, rents, lighting, and heating.

a. Suggest ways to eliminate any of these wastes.
b. Would you suggest government regulation? Why, or why not?
c. What attempts are being made in your community to eliminate wastes of competition?

3. Do you know of any former competitive industry that is now monopolistic? If so, did the change affect prices? How?
4. Make a list of former monopolies which do not now exist.
a. Did they become insolvent? If so, why?
b. Did they change to competitive conditions? Why?
5. Suppose you were a watchcase manufacturer.
a. At what point would you fix the price of your product?
b. Would you manufacture different grades of watchcases? Why, or why not?
c. How would you meet any competition that might arise?
6. Suppose you conducted a monopolistic business with a capital of $100,000. If your net income from the business was $75,000 a year, how could you make the return appear to be much less?

C

1. Discuss the common saying that "competition is the life of trade."
2. "The monopolist has it in his power to fix prices at whatever point it suits his fancy."
a. May the monopolist ignore demand? Explain.
b. Can the monopolist control demand? Explain.
c. Are high prices alway the most advantageous to the monopolist? Why, or why not?
d. Does the elasticity of the monopolized good affect the monopoly price?
e. Would a wheat monopolist and a diamond monopolist be governed by the same consideration?
f. In what three ways is the monopolist restricted in his price-making?
3. Suppose a manufacturer of talking machines should absorb his competitors.
a. What would be the effect on production?
b. How would prices be affected?
c. Would new competitors be likely to arise? Why?

4. "A monopoly is often advantageous to consumers, for prices are less than they would be under competitive conditions." How can this be true?

5. The belief generally prevailed a few years ago that any manufacturing monopoly was sure to succeed.

a. Account for this belief.

b. Has experience justified this belief? Explain.

c. What factors were overlooked by those who held this belief?

d. How has the attitude of society toward monopolies changed?

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CHAPTER XII

TRANSPORTATION

35. Stages in the Development of Transportation in the United States

Natural waterways. — The first settlers in the English colonies came by way of the sea, and here they found a land blessed with a coast admirably adapted to navigation. Also, as they became acquainted with the interior, they found numerous navigable streams which took their rise in the Alleghenies and flowed gently to the sea. Some were so broad and inviting to ocean-going ships as to appear more like arms of the sea than rivers. The Connecticut, the Hudson, the Delaware, the Potomac, the James, the Savannah, and many others, each drained great stretches of fertile land or penetrated deep into the fur country. Very soon, as we might expect, numerous settlements were planted along their banks, and then they became important arteries of trade and travel.

As soon as the settlers had pushed across the mountains westward they found themselves again favored by nature; for before them lay one of the finest river systems in existence, also a chain of navigable lakes unsurpassed in the whole world. Further south a great number of short streams emptied into the Gulf. Soon the Ohio became the great natural highway to the West, while the completion of the Erie Canal in 1825 opened the lakes to active navigation. Again, as in the colonial days, the settlers depended much on these waterways; and naturally so,

for they were gifts of nature waiting to be utilized by the possessors of even the crudest and cheapest craft.

River navigation perhaps played a relatively less important part in the settlement of the territory west of the Mississippi, yet without rivers the development of those regions would have been materially retarded. The Red, the Arkansas, the Missouri, and the tributaries of the upper Mississippi each formed important links in the movement to the Far West. Up these streams pushed thousands of settlers who would have been unwilling or unable to undertake the journey by land.

Wagon roads. — As settlement spread there arose a demand for wagon roads, which the colonial governments ordinarily met by compelling each householder to expend a certain number of days' labor yearly on the public highways. Usually these highways were little more than widened bridle paths or Indian trails, impassable except under the most favorable circumstances. Later the frontier states provided for elaborate systems of wagon roads, many of which never got beyond the projection stage. Aside from a few roads which connected the more important settlements, early state enterprise seems to have done little for the construction of permanent wagon roads. The farthest advances in this direction were made by state-incorporated turnpike companies. These companies had a direct interest in encouraging travel over the wagon roads which they controlled. Consequently, they constructed them with considerable care, often laying down stone, logs, or sawed timbers, and kept them in good repair. In return for the expenses thus incurred, the companies were authorized to charge tolls. Wagon roads, it was soon seen, were too intimately bound up with the welfare of society to permit private individuals or corporations to fix charges and lay down regulations for their use. Consequently, the turnpike companies were compelled one after another to relinquish their control over highways.

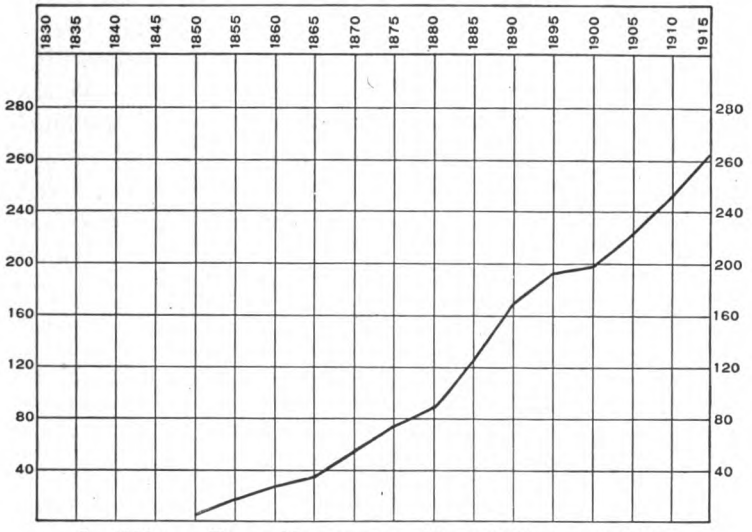
Canals. — Simultaneously with the building of turnpikes was the construction of artificial waterways known as canals. The former method was not, as some writers have stated, a forerunner of the latter. Nor was it expected that these two systems of transportation should compete, since canals would necessarily be restricted by nature to a few localities. It would be more logical and closer to the facts to say that during the mania for canal-building the people of the United States regarded them merely as great trunk lines of commerce and communication toward which wagon roads of every description would naturally converge.

The first great success in canal-building in the United States was the Erie Canal, begun in 1817 and opened to navigation in 1825. Spurred on by a desire to share with New York City the prosperity of the western trade, Philadelphia and Baltimore persuaded their respective states to project similar enterprises. Soon the canal craze spread westward. Ohio built two, connecting Lake Erie and the Ohio River; Ohio and Indiana combined to join Lake Erie to the Ohio River at Evansville; while Illinois, with a much simpler task than either Ohio or Indiana, built the Illinois-Michigan Canal, connecting the Illinois River and Lake Michigan. It is safe to say that every one of these canals had a beneficial influence on the settlement of the Middle West, though none of them lived up to the expectation of its more optimistic supporters. They failed, not necessarily because they were poorly constructed or poorly located, but only after the railroad had demonstrated its superiority as a means of transportation.

Railroads. — The railroad history of the United States may be said to have begun in 1830 with the opening of the Baltimore and Ohio to traffic. After many experiments in respect to roadbed, rails, engines, and cars, both on this line and on other early lines, there was evolved a distinctively American railroad.

During the earlier years progress was slow. In 1830 the total number of miles in the United States was twenty-three. In 1840 the number was almost three thousand. From that time on growth was more rapid, the total mileage for the whole country in 1860 being in excess of thirty thousand. During the Civil

RAILROAD MILEAGE IN THE UNITED STATES: 1830–1915.
(In thousands of miles.)



IN 1830 THE TOTAL MILEAGE WAS 23; IN 1840 IT WAS 2818.

War neither government made notable headway in railroad construction. The return of peace, however, started activities anew with the result that a mania for railroad-building spread over the country, particularly in the West and Far West. Soon after 1880 the total mileage passed the one hundred thousand mark, the average annual increase exceeding ten thousand miles. Later, the building of new lines gradually gave way to

the extension and consolidation of old ones, until at the present time a relatively few organizations control the through traffic in the United States.

Recent tendencies. — Owing to a number of disconnected causes — to the inability of the railroads to handle readily all of the freight offered, to improvements in automobiles, and to the use of cement for road-building — more attention than ever before is now being given to water and wagon-road traffic. Thinking people are becoming convinced that the United States should no longer neglect the natural transportation facilities furnished by the Mississippi River and its tributaries. To that end the national and state governments, as well as individuals and corporations, are studying how these rivers may be used to the best advantage. The states, stimulated by the desire of owners of pleasure cars for an all-the-year-round service, are constructing hard roads. Already in some sections automobile trucks are carrying freight between neighboring cities. It is not too much to expect — in fact it has already been proved practicable — that the future will see the automobile an active competitor of railroads in hauling freight as well as passengers.

36. Railroad Competition

Railroads operate under the principle of diminishing costs. — Producing under conditions of decreasing costs, as has already been explained, simply means that the cost per unit declines with an increase in the number of units produced. Most manufacturers and retailers as well as a great many business men in other lines produce under these conditions, but none of them enjoy its benefits more than do railroads.

It is a fact easily observed that a large part of the expenses of a railroad goes on day after day whether one train or a half dozen are operated. Its roadbed, depots, terminals, and much of its equipment must be maintained whatever the volume of

the traffic may be. Even a great deal of the expense incurred in the payment of wages is fairly constant. Thus, it is plain that the cost of handling additional traffic is in no wise proportionate to the increase in the traffic itself. Working under these conditions, railroad managers, as long as they were permitted to compete freely for business, were tempted to give large shippers the benefits of low rates; but in doing so they opened the door to the worst abuses with which the railroad business has ever been cursed.

Discriminations. — We have just seen how discriminations originated. We may now properly turn to a study of their nature and character. Briefly stated railroad discriminations may be grouped as follows: (1) discriminations among products, (2) discriminations among localities, and (3) discriminations among persons, firms, or corporations. Discriminations among products create less opposition than do discriminations in either of the other two cases, largely because they have not been widespread, and hence have affected few people. The best example is found in a comparison of wheat and flour rates from the upper lake region to the Atlantic seaboard. Not many years ago the railroads which connected those two sections of the country charged a very low rate on east-bound wheat and a correspondingly high rate on flour in the same direction. The result was, so Minnesota millers claimed, that exporters preferred to have their wheat ground in the mills along the coast.

Discriminations among localities have been more serious in that they have affected more people, and have created in the minds of the public a suspicion that the managers practicing these discriminations have profited financially. Discriminations of this character have usually taken form in favors granted one city and withheld from its rivals. Oftentimes the result has been prosperity for the one and stagnation for the others. No doubt if all the reasons for making this kind of discrimination

were known it would be found that they were many and varied; yet the chief reason has usually been that the railroad making the discrimination had valuable property in the favored city.

The most repulsive form of railroad discrimination is among persons, firms, or corporations; for it violates all the rules of fair play by giving one competitor an unfair advantage over another. The worst offender in this respect seems to have been the Standard Oil Company, which, with its enormous wealth and influence, was able to force railroads to do its bidding. At one time this company compelled the railroads, not only to give it special rates on refined oil, but also to pay into its treasury a portion of the freight they collected from competing refineries.

It would be misleading to close this discussion without calling attention to two pertinent facts. First, the various discriminations just noticed are now illegal and, let it be hoped, little practiced. Second, the railroads themselves were often unwilling partners in the discriminations, though it must be said on the testimony of expert railroad administrators that ordinarily it was more profitable to give one large shipper low rates in return for his entire business than to exact a higher rate from a number of smaller shippers who were at any moment likely to be won over by competing lines.

Nature of railroad competition. — To understand the nature of railroad competition we must revert to an earlier section in this chapter in which the principle of doing business under conditions of diminishing costs was noted. Since the unit cost of handling additional freight or passengers is very small, competition among railroads, when it exists at all, is likely to be very bitter. For that reason it is known as "cutthroat" competition. Not many years ago two competing lines between Chicago and New York engaged in a memorable struggle for the traffic between those two points. Ridiculously low rates were

offered; so low were they in fact that both railroads did business at a loss, thereby endangering their solvency. Finally an arrangement was made by which the two lines *pooled* their combined business, each getting a certain share determined in advance. The outcome of this struggle is illustrative of the way in which practically all railroad wars have been settled.

37. Rate-making

The principle of joint costs. — Since a large portion of a railroad's expense goes on from day to day irrespective of the amount of its traffic, and since the same equipment is used to haul a variety of products, railroads find it *profitable to do some of their business at a loss.* Let us suppose that a certain line operates nine trains a day at a total cost of $4500, or $500 a train. According to our supposition, this cost includes everything — operating expenses, interest on capital, and replacement fund. Let us suppose further that the entire additional cost involved in adding a tenth train would be $300, making the total cost for operating the ten trains $4800, or $480 a train. Can the railroad under these conditions afford to operate the tenth train if it earns less than $480? It can. Anything above the $300 extra cost involved in its operation would be clear earnings.

Charging all that the traffic will bear. — Every railroad manager has faced such a problem, and we may now concern ourselves with his methods of solving it. Suppose he is called on to fix a rate for some product which his road has never handled before, and, to connect up our present illustration with the preceding one, that it is offered in quantities sufficient to demand an entire train daily, which we will call the tenth train. Clearly, our manager would ordinarily not be willing to make the trainload rate lower than $300; nor would he dare to set it at a figure so high as to cause the shipper to abandon the project

of shipping his goods. Here, then, are the extremes between which the manager may fix his rate; and we may well believe that he fixes it as near the upper limit as possible; that is, he *charges all that the traffic will bear.*

Long and short hauls. — To a great majority of people the most inconsistent practice of railroads is to charge absolutely less per ton, or car, or train, for a long haul than for a short haul. Their reason for so doing becomes clear when one takes into account the principles of joint costs, and of all that the traffic will bear. The roads themselves properly claim that the rate which they set for the short haul is equitable; and that, while they could not afford to build and equip a line merely to make the long hauls at a lower rate, they can and do make them at a profit simply because a great part of their expense must be met regardless of the volume of the traffic. It goes without proof that they would prefer the long haul at a higher rate; which, however, competition with other lines and with water navigation compels them to forego in order to get the business.

38. Government Regulation of Railroads

Attempts of the states to regulate railroads. — The first serious attempts to regulate the railroads were made by the various states. Nothing was more natural, for many of the states had assisted financially in the building of railroads and all of the railroads operated under state charters. The chief thing the state tried to do was to regulate freight and passenger rates. The railroads on their part very generally resisted regulation: by testing the constitutionality of the various railroad laws, by bringing pressure on legislatures to repeal obnoxious laws, and by politely refusing to comply with the laws. Such actions merely hastened the day of effective railroad legislation, for they showed as nothing else could that the railroads, if allowed to carry out their policies, would place them-

selves above the law and the public. Unfortunately, many of the people, like the railroads, unwilling to allow the laws to take their course took matters in their own hands. They even went to the point at times of compelling individual train crews to collect rates and operate trains contrary to instructions from the managers. In the end some of the states established control over the lines within their boundaries; but the control was only nominal, since they had no authority to say how interstate trade should be conducted, that being a power expressly delegated to the national government by the Constitution of the United States.

The Interstate Commerce Act. — Since the states had no control over interstate commerce, it was plainly the duty of the federal government to enact a comprehensive law for the regulation of all commerce that crossed state boundary lines. Bills were introduced and discussed in both houses of Congress. Wide differences of opinion appeared, especially as to the best method of enforcing the regulation embodied in the proposed law. The final result was the Interstate Commerce Act of 1887.

Among the provisions embodied in this act, six deserve mention at this point. (1) Discriminations, such as we have discussed in an earlier section of this chapter, were prohibited, under penalty of fine and imprisonment. (2) The act provided that interstate railroad rates should be just and reasonable. (3) To render provisions 1 and 2 effective, railroads were required to make their rates public, and not to change them without due notice. (4) Railroads were prohibited from charging more for a short than for a long haul unless authorized to do so by the proper authorities. (5) Pooling was declared to be illegal. (6) The act provided also for an Interstate Commerce Commission, appointed by the president of the United States, which should direct the enforcement of the law.

During the earlier years of the act the commission found it difficult to enforce the law. The first difficulty lay in the per-

sonnel of the commission itself, which, while it contained able men, served too often as a convenient place for retired members of Congress to spend their declining days. Second, the law itself, as an examination of its provisions shows, was largely

A PORTION OF THE INTERSTATE COMMERCE ACT.

CHAP. 104.—An act to regulate commerce. Feb. 4, 1887.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the provisions of this act shall apply to any common carrier or carriers engaged in the transportation of passengers or property wholly by railroad, or partly by railroad and partly by water when both are used, under a common control, management, or arrangement, for a continuous carriage or shipment, from one State or Territory of the United States, or the District of Columbia, to any other State or Territory of the United States, or the District of Columbia, or from any place in the United States to an adjacent foreign country, or from any place in the United States through a foreign country to any other place in the United States, and also to the transportation in like manner of property shipped from any place in the United States to a foreign country and carried from such place to a port of transshipment, or shipped from a foreign country to any place in the United States and carried to such place from a port of entry either in the United States or an adjacent foreign country: *Provided, however*, That the provisions of this act shall not apply to the transportation of passengers or property, or to the receiving, delivering, storage, or handling of property, wholly within one State, and not shipped to or from a foreign country from or to any State or Territory as aforesaid.

Interstate commerce regulations. Application.

Proviso. Not applicable to traffic wholly within one State.

The term "railroad" as used in this act shall include all bridges and ferries used or operated in connection with any railroad, and also all the road in use by any corporation operating a railroad, whether owned or operated under a contract, agreement, or lease; and the term "transportation" shall include all instrumentalities of shipment or carriage.

"Railroad." "Transportation." Definition of.

All charges made for any service rendered or to be rendered in the transportation of passengers or property as aforesaid, or in connection therewith, or for the receiving, delivering, storage, or handling of such property, shall be reasonable and just; and every unjust and unreasonable charge for such service is prohibited and declared to be unlawful.

Charges to be reasonable.

SEC. 2. That if any common carrier subject to the provisions of this act shall, directly or indirectly, by any special rate, rebate, drawback, or other device, charge, demand, collect, or receive from any person or persons a greater or less compensation for any service rendered, or to be rendered, in the transportation of passengers or property, subject to the provisions of this act, than it charges, demands, collects, or receives

Special rates, rebates, etc., prohibited.

negative in character; that is, it stated what the railroads might *not* do, rather than what they should do. Finally, since the regulations of the commission were subject to judicial review, railroad lawyers made special efforts to have its decisions reversed in the United States Courts, in order to create in the

minds of the people the feeling that the commission was weak and inefficient.

Amendments to the law. — The railroad lawyers did in fact create the impression that the commission was weak, also, to their own grief, that the law needed to be amended so as to give it more authority. Accordingly, in 1891 the commission was empowered to bring suit in the name of the United States against offending railroads. Later, the Elkins Amendment (1903) and the Mann-Elkins Amendment (1910) increased the number of commissioners and changed the annual salary from $7500 to $10,000; gave the commission control over the book-keeping methods of the roads; prohibited any railroad from transporting products, lumber excepted, in which it is interested as a producer; and finally, it gave the commission power to say just what rates are reasonable. The Elkins-Mann Act created a commerce court, which was abolished a few years later, to pass on appeals from the commission that had formerly been carried to the Supreme Court of the United States.

Meaning of government regulation. — The regulation of railroads by the government has a deep significance. It came only after the public was thoroughly convinced that the railroad business was necessarily monopolistic in character, and that private individuals were powerless in coping with the problems of transportation. The various railroad laws show that the public, while slow to act, can be aroused when its vital interests are in jeopardy. What it did in the case of railroads it can do in any other case; and the important thing for us to remember is that the interests of society are paramount, and must be conserved at all hazards.

There is, however, a vital difference between government regulation and government ownership. The latter is far more revolutionary in its nature and involves greater administrative problems.

EXERCISES AND PROBLEMS

A

1. What is the character of the rivers that empty into the Atlantic?
2. Mention and locate the most important harbors along the Atlantic coast.
3. How do they compare with the Pacific harbors in number and size?
4. What was the importance of rivers in settling the West?
5. What effect did the success of the Erie Canal have on canal-building in the West?
6. When was the Baltimore and Ohio Railroad begun?
7. How did the Civil War affect railroad-building?
8. Which Pacific railroad was first opened to traffic?
9. Why did the national government assist in the building of transcontinental railroads?
10. Why should our rivers be utilized to a better advantage?
11. What are the present tendencies in wagon-road building?
12. What is meant by the expression "joint costs"?
13. Mention the various kinds of railroad discriminations.
14. How can a railroad often charge less for a long haul than for a short haul?
15. Why are railroad rates higher on shipments east than on shipments west?
16. On what ground, if any, is it justifiable for railroads to charge what the traffic will bear?
17. What are "rebates"? "pools"?
18. How successful have the states been in regulating railroads?
19. When was the original Interstate Commerce Act passed?
20. What changes have been made in this act?
21. Is railroad capital fixed, circulating, specialized, or free?

B

1. A merchant of ladies' ready-to-wear garments decides to put in a stock of shoes.
   a. How will he determine his overhead expense in handling shoes?
   b. Can he afford to sell shoes cheaper than an exclusive shoe merchant? Why, or why not?

c. Can he afford to sell shoes at a *loss?* Why?

d. Can he make money by doing so? How?

2. Suppose you invest $2000 in railroad stock. If the Interstate Commerce Commission reduces rates so that the value of your stock falls to $1500, have you a just complaint? Explain with some detail.

3. Make a list of the public service corporations in your community.

a. Which have corporative forms of organization?

b. Which are monopolies?

c. Which have their rates for service fixed by law?

d. Which, if any, do not earn fair dividends?

4. What transportation systems have been beneficial to your community? What has been the special benefit? Make as long a list as you can of the ways by which you have seen goods transported.

5. Illustrate, from your own experience or observation, the effect of the following on railroad building:

a. Rivers.

b. Mountains.

c. Seaports.

d. Raw materials.

e. Climatic conditions.

C

1. "Many of the routes of our most important wagon roads were marked out long before Europeans came to our shores."

a. What factors determined the location of paths made by wild animals?

b. Why would the Indians naturally frequent these paths?

c. What roads did the earliest settlers use?

d. Why should they widen and improve the paths?

2. A political speaker once declared that railroad rates should be the same for all commodities. If the many rates now in effect were displaced by one flat rate:

a. How would prices be affected?

b. Make a list of goods which might not be shipped.

c. How would railroad rates be affected?

d. What would be the effect on railroads in different sections of the country?

e. How would railroad extension be affected?

3. "Improved means of transportation have tended not only to equalize conditions of living in different parts of the world, but also to better the living conditions of the lower classes." Do you agree? Why, or why not?

4. The Interstate Commerce Commission was authorized a few years ago by Congress to undertake a valuation of the railroads of the country.

a. Why was this authorization made?

b. What different kinds of valuation was it possible to make?

c. Which kind would the railroads themselves prefer?

d. What were some of the difficulties encountered by the Commission?

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TAUSSIG, *Principles of Economics*, 2d ed., Vol. II, pages 368–381.

CHAPTER XIII

MARKETING THE PRODUCTS OF INDUSTRY

39. Separation of Producers and Consumers

Producing for the market. — It is a mere truism to say that production leads directly to the market — that is, that each producer expects not to consume his own products, but to sell them. Aside from those engaged in farming, the typical American workman seldom has occasion to consume the products of his own hands or brain. If he works in a shoe factory his whole attention is absorbed in the detailed operation he is called on to perform. His employer could not possibly pay him in his own products, for he cannot live by shoes alone. Producing for the market thus leads to striking results. It permits the individual to specialize, and to create utilities which he himself has no desire to consume.

So accustomed does each person become to confine his productive activities to his own narrow field that he seldom gives a serious thought to the modifications which his product must often undergo before it is finally ready for consumption. A lumberman in the Far Northwest fells trees and cuts their trunks into convenient lengths for rafting. So far as he is concerned the logs are finished product. He has no interest in the tortuous course through which they must go before they can be consumed. His is the log market, not the market for house lumber, ship timbers, or lead pencils. His whole attitude of mind, however, would be changed if he produced for direct consumption. Then he would see logs, not as logs, but

as houses, barns, sheds, and fences; that is, there would be no such thing to him as a log market. Fortunately for the progress of society, the productive processes are usually divorced from consumption in so far as identical goods are concerned.

Buying for consumption. — Producing for the market implies that the market is the source of want gratification. Our shoe-factory worker goes into the market and there he supplies his wants by exchanging, not shoes, but the wages which he has previously received in the form of money. This too is such a common everyday occurrence as seldom ever to attract attention. Yet its significance is apparent when we give it a second thought. Every one of us daily consumes a variety of goods the origins of which are remotely removed from us. A common lead pencil carries the stamp of far distant forests and mines, of complicated and costly machinery, of countless miles of rail and water transportation, and of infinite labor and toil.

40. Indirect Methods of Marketing

The primitive market place. — The first bartering, as we have already noticed, was characterized by the higgling of two individuals alone, uninfluenced by other traders. The next step was the primitive market place, which owed its origin to the accessibility of its location to various tribes; or perhaps to the influence of some neighboring church or monastery which undertook to keep peace among the traders. Here at stated periods the people assembled, bringing with them the products which they desired to exchange for other goods. Very soon, we may imagine, it was discovered that certain goods, such as iron, spices, salt, and woolen cloth, were very generally in demand. Naturally, some more alert than their neighbors saw the advantage of devoting more time to the production of those goods which were generally desired. They saw also that they could supply their own wants for other goods easier by

resorting to the market place than by direct production. At the same time another group known as merchants saw the advantage of giving their whole time to the collection of goods for these markets. Gradually there grew up the custom of

MAXWELL STREET, CHICAGO.

Here business is conducted on the street, very much as it is in an ordinary retail store.

using money in making exchanges, the merchants buying goods from producers and selling them again to consumers. From such crude beginnings has developed the highly complicated industrial life of the present time with its producing to sell and its buying to consume.

The place of the retailer. — Clearly, the most important link in the chain which binds production and consumption is the retailer, for it is he that must anticipate the wants of the consumer, provide beforehand for supplying these wants, and have the goods ready in convenient form for the consumer when they are demanded. His position is also the least open to attack by those who insist that the producer and the consumer are too far apart. His would be the last to give way. The normal American family buys its groceries in small amounts — a pound of coffee, five pounds of sugar, a quarter of a barrel of flour, and so on. It has not sufficient funds to permit buying in any other way, if it were so inclined. Besides, it is not inclined, for too much trouble is involved in finding producers. Even that would not be the end of the matter. Some one must divide and subdivide the product, wrap it carefully, and deliver it to the door of the consumer. All these things the retailer does. Besides, he usually furnishes limited credit, gives his advice freely in making selections, and stands behind the quality of his goods.

During the early months of the Great War many consumers were persuaded that they could effect economies by going more directly to the producers. Consequently, they demanded that wholesalers in meats, fruits, vegetables, and bread should meet them halfway by establishing conveniently located markets. This demand the wholesalers very generally met. In one Western city it soon became a practice, if not a fad, for well-to-do people to trade at these markets and to carry their purchases home. The spirit which prompted this movement was laudable to say the least. It taught the typical housewife more about relative food values than she had ever before known. Besides it gave her a new view of life and a keener sympathy with her less fortunate neighbors. The movement, however, did not result in the elimination of retailing costs, though it evidently

reduced them for a time. The wholesalers found that considerable cost in the way of rent, clerk hire, depreciation, and dishonesty, was involved. Also the consumer found that the economies effected did not in many cases compensate for the loss of real service on the part of the established retailer.

Place of the middleman. — The economic justification of the middleman — jobber, commission merchant, broker — is less evident, though even he renders a service which the business world would find it inconvenient, if not impossible, to abolish. His chief function, as marketing is now organized, is to serve, as it were, as the agent of retailers; to collect for them and have ready on call supplies of goods from which they can replenish their stocks; to assist them in anticipating demand; and finally, to extend credit to the retailers, to give them the benefit of his experience and judgment, and to secure them against loss resulting from inferior goods.

The middleman, unlike the retailer, who comes in contact with the consumer, renders his greatest marketing service to the producer. A wholesale grocer, for example, deals more or less directly with meat-packers, canners, millers, and importers. He furnishes them a market which he has already made, or undertakes to make, among retailers, thereby relieving them of heavy selling expense. Moreover, his advance purchases, by rendering it easier to make production conform to consumption, tend to stabilize industry. The commission merchant, particularly if he deals in agricultural products, occupies an important place in marketing, which farmers, despite their contention to the contrary, would find it difficult to fill by dealing directly with packers or retailers.

Basis of indirect marketing. — It must be clear by this time that there is some good reason why producers and consumers do not ordinarily deal directly with each other. It must also be

equally clear that no middleman or group of middlemen can forge, *uninvited*, additional links in the marketing chain. Consequently, there must be some economic reason for their existence as such. We can best find this reason by reference to some simple, everyday practices familiar to us all. The typical American farmer knows that in the neighboring town there is a market for his weekly supply of eggs. The people of the town know also that every farmer in the surrounding country has a surplus of eggs. With these facts established, it is obvious that our farmer could, if he desired, dispose of every one of his eggs in the town by peddling them from house to house; also that any housewife in the town could, if she desired, secure her weekly supply of eggs by calling at some farmer's home. The farmer ordinarily does not care to undertake the sale of his surplus eggs among the consumers in the town. The town housewife, on her part, has, let us say, no ready means for going into the country. In either case time and expense are involved in effecting a sale. Neither is willing to take the initiative. Both resort to the local grocer, who can, and usually does, handle the eggs cheaper and with greater satisfaction to both consumer and producer than either the farmer or the housewife could have handled them. The retailer can also render cheap and efficient service in the matter of delivery, if he is not too much incumbered by those who abuse it. The only proof for this statement is that independent delivery systems operating in many moderately sized cities usually charge no more than five cents for delivering an order of any amount. Delivery of a loaf of bread or of a spool of thread under these circumstances imposes a burden on the consumer; and it should, for they are the very consumers that have rendered delivery systems costly. As it is with retailers so it is with middlemen. They have arisen to fill gaps between producers and consumers which neither could or would fill.

Wastes in indirect marketing. — The mere fact that certain groups of retailers and middlemen meet demands made by producers and consumers is not evidence in itself that there are no sources of waste in our present system of marketing. One, the delivery system, has already been mentioned. Another is poorly written and poorly prepared advertising copy. A third is in the failure to make distinctions between consumers. A city department store, let us say, maintains a free rest-room, a free nursery, and provides telephone service without cost, the entire expense being paid in the long run by its customers. Those who come in often to rest, or to leave their babies while they shop, and those who use the free telephone service regularly, can well afford to pay higher prices for goods than would be the case under more modest surroundings. But how about those customers who are never tired, have no children, or are dumb? Why should they be compelled to pay for something they cannot use? The usual answer is that this store, because of its large volume of sales, sells as cheaply as its smaller competitors. There is truth in the answer, which, however, does not explain why customers should be charged for services they cannot enjoy.

Another waste in the present system of marketing, but which in itself is not inherent therein, comes from selling goods on credit. Any merchant, whether he be retailer or jobber, knows from experience or observation that a credit business always involves bad accounts, and that its maintenance in the mere matter of bookkeeping incurs considerable expense. Clearly, cash customers must, if the seller is not to lose, bear the burden of bad accounts. Here as in many other cases of waste the consumer is largely responsible. If every cash customer should confine his purchases to cash stores, the practice of granting credit would cease in a short time. What has been said in this respect is merely illustrative. Any one of us can, by observing,

discover a surprisingly large number of other sources of waste in marketing.

41. More Direct Methods of Marketing

Nature of the problem. — The need for eliminating every unnecessary expense involved in getting goods into the hands of the consumer is real; and no proposal that offers to meet this need should be neglected, even though its adoption might work hardships on particular groups of individuals. Society is entitled to every saving possible in this respect. No individual or group of individuals can rightfully impose its smaller interest as an obstacle to the progress of social welfare. Consequently, the contention that some change in marketing methods is undesirable simply on the ground that it destroys the business of some class of merchants, is baseless. In fact, it is worse than baseless; it is harmful, for it assumes that society should continue to reward the economic activities of a man after his services to society have ceased. Apart from such contentions and the arguments that go with them, we can conclude that any change in marketing methods carried on under conditions of competition is likely to be beneficial, since it could occur only as the result of a natural demand.

The department store. — The department store claims to effect economies in marketing: (1) by eliminating jobbers, brokers, and even importers, and (2) by saving, through combination and organization, much of the expenses of retailing incurred by small stores. Whether or not it succeeds in either of these two respects is a disputed question, since its gains from buying direct and in large quantities and from its economies in organization are offset, at least to some degree, by its heavy advertising and overhead expenses. It is probable that the advantage which these stores offer to the consumer is one of selection rather than one of price. Obviously, in a great

many lines a modern department store has a wider variety than any of its smaller competitors. There is not, however, such a wide difference as many people suspect, especially between the

Courtesy of John Wanamaker, Philadelphia

INTERIOR VIEW OF A LARGE DEPARTMENT STORE.

department stores, on the one hand, and well-managed specialty stores, on the other.

The mail-order house. — The mail-order house goes even beyond the department store in an effort to bring producer and consumer closer together. Working from the production side, the typical mail-order house is a manufacturer as well as a large-scale buyer of goods directly from producers. It may own sawmills, lumber yards, furniture factories, shoe factories, stove factories, and various other mills and factories. Or, as is often the case, it may contract for the entire output of factories and mills owned and operated by other concerns. Whatever

the method employed, its purpose in any case is to secure goods at the lowest possible price. Much more significant are the methods employed by mail-order houses to get their goods into the hands of consumers. Invariably, the medium of salesmanship is a printed catalog, characterized by its excellence of advertising copy and illustrations. Customers order direct from the catalog, each advertised article bearing a stock number and price.

No other business institution in the country is so universally disliked by retailers, who argue that a mail-order house, quality as well as price considered, does not give better values than local dealers. They also take the position that it is the duty of consumers to keep their money at home by patronizing them. The validity of the first argument rests on a question of facts; of the second, on economic principle. Whether or not a certain mail-order house offers better values than a certain group of retailers is a question that can only be answered, if at all, after an exhaustive examination by experts. The appeal to local pride has usually had little weight, since consumers are likely to feel justified in getting the best bargains possible. Retailers everywhere are beginning to see the futility of the "home-market" argument, with the result that more and more they are taking the initiative in persuading people to compare values, and in some cases the retailers are profiting by studying the advertising copy in the "big catalogs." Moreover, they are awakening to the possibilities which come from a more liberal policy of advertising in their local newspapers.

The chain store and the variety store. — The typical chain store resembles the department store in that it attempts to eliminate the middleman. Unlike the department store, however, it deals in one general line, and has many different sites. The greatest advances in this respect have been in such lines as restaurants and drug stores. The large variety-store system

also buys direct from manufacturers and retails through its stores directly to the consumer. Its success has rested on the fact that regular stores have never given sufficient attention to what they are likely to consider "trifling trade." This trade for any one store, such as a hardware store or a plumbing shop, is in fact of slight importance. Yet when gathered together it mounts into millions of dollars annually.

Direct sale to the consumer. — It will be noticed that in the preceding discussions the attempts to lessen the distance between the producer and the consumer have been made by neither producers nor consumers as such, but by third parties. We may now turn our attention to another aspect in which the producer tries to bring his product directly to the consumer. The most easily observed example of this is the sale of gasoline by the Standard Oil Company. Everywhere one sees the stations of this concern serving the automobile public, though it must be kept in mind that the same product may be obtained from local dealers. Other producers, too, sell only direct to consumers, depending on personal letters, catalogs, and national advertising to create a demand for their goods.

EXERCISES AND PROBLEMS

A

1. What is the significance of producing for the market?
2. When is a product finished?
3. How did markets arise?
4. What determined their location?
5. What kinds of goods were first produced for the market?
6. Just how important is the place of the retailer in marketing?
7. What did the Great War teach about marketing?
8. What is the difference between a retailer and a middleman?
9. Why are there so many different kinds of middlemen in marketing?
10. Of what value is the wholesaler or commission merchant?

11. What are some of the wastes in indirect marketing?
12. How far would direct marketing eliminate these wastes?
13. Why do department stores maintain free rest-rooms?
14. Who pays the expense of maintaining them?
15. How does credit lead to waste, particularly in retailing?
16. What groups of individuals might object to more direct methods of marketing?
17. How valid are the claims of department stores that they sell goods cheaper than their competitors in special lines?
18. What effect has variety of stock on volume of trade?
19. What is the chief objection urged against the mail-order house?
20. How valid is this objection?
21. What is a "chain store"?
22. Why can a variety store usually offer goods at excessively low prices?
23. What lines of goods are best adapted to sell directly to consumers?

B

1. Trace a quantity of iron ore through its different processes of production, pointing out the different markets in which it is offered for sale. Do the same with corn, wheat, and cotton.
2. Mention any articles of your own production which you have consumed.
3. Imagine yourself in an early English market place.
   a. Where was it located?
   b. What kinds of goods were offered for exchange?
   c. What difficulties were encountered in making exchanges?
   d. Was bargaining characterized by "higgling"? Explain.
   e. How important was the part played by money?
4. Suppose you decide to follow the "cash and carry" plan of buying groceries and meats.
   a. How much time would you consume each day in going to the markets?
   b. Would these trips involve wear and tear on shoes and clothing?
   c. Can goods be carried more cheaply than they can be hauled?
   d. Is your time worth more or less than that of a delivery boy?
   e. Would you be more likely to buy with greater care than if you telephoned your orders?

f. Weigh the advantages and disadvantages of marketing in person.

i. Which has the greater weight?

ii. Is the weight as great as is sometimes thought?

5. Give some instances from your own experience or observation, of attempts to bring producers and consumers closer together.

a. How well did these attempts succeed?

b. Did any one oppose them? Who? Why?

6. A merchant requests you to draw up plans for the establishment of a chain of stores.

a. What kind of business would you suggest? Why?

b. In what cities would you establish stores?

c. What sort of sites would you desire to utilize?

d. How would the choice of cities and sites be influenced by the character of the business?

C

1. "The greatest need in the modern industrial world is to bring the producer and the consumer together."

a. Is this a universal opinion? Why, or why not?

b. Who would be likely to hold an opposite opinion?

c. What steps would be necessary in making such a change?

d. Who would profit most?

e. Who would suffer?

2. During the past decade two or three men have made millions of dollars in operating chains of restaurants.

a. What particular advantage has the chain store in the restaurant business?

b. Which types of restaurants still predominate in the cities?

c. What is the present tendency?

d. How does a rise in the prices of foodstuffs affect the different types of restaurants?

3. The chief argument advanced by retailers against mail-order houses is that the people would profit by spending their money at home.

a. Do mail-order houses undersell local merchants? Discuss.

b. Just how far is this argument valid?

c. To what extent is advertising a factor in the success of the mail-order house?

d. Can local merchants use to advantage the methods employed by mail-order houses? How?

e. How may local newspapers be used to advantage by local merchants in their competition with mail-order houses?

4. Discuss with a live local merchant the economies claimed by mail-order houses. Ask him to compare prices and quality. Which offers the best value?

SUPPLEMENTARY READING

ELY, *Outlines of Economics*, 3d ed., page 154.

CHAPTER XIV

GOVERNMENT AND PRODUCTION

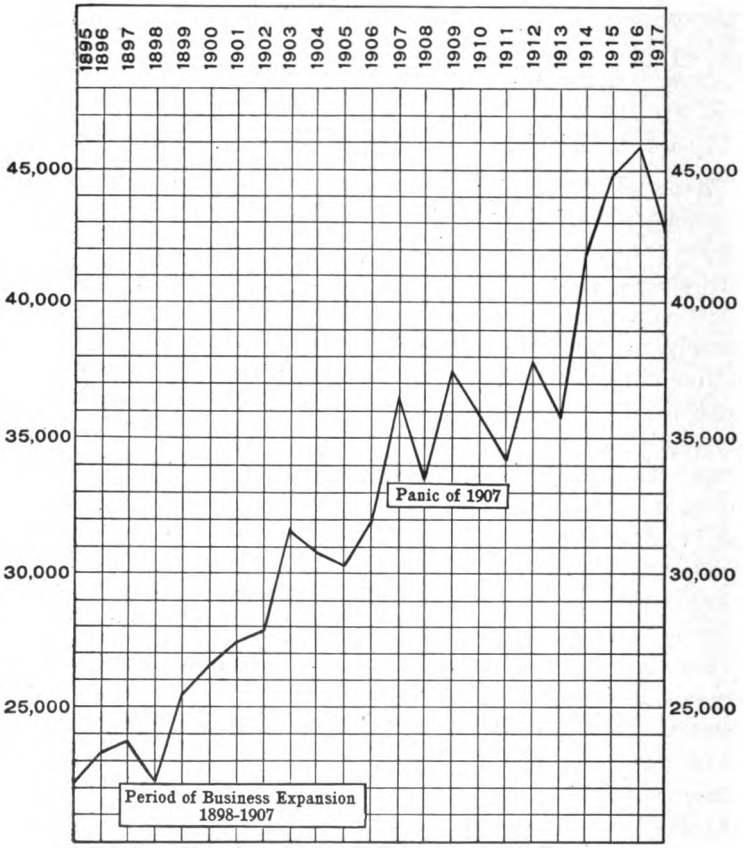
42. Patents, Copyrights, and Trade-marks

Hope of reward a factor in improvement. — The hope of financial reward stimulates enterprisers, as we have seen, to exert themselves industrially. The same hope stimulates inventions and literary productions, though the opinion prevails among many people that inventors and authors work merely for the love of the work itself. Occasionally some individual gives his whole life unselfishly to the production of a machine, or to the discovery of a chemical process, or to the writing of a book. The overwhelming majority of men, however, whether they be enterprisers, laborers, scientists, or authors, are encouraged, if not inspired, to toil long hours and to undergo mental and physical discomfort by the hope that their labors will bring them financial reward. And it is fortunate for the progress of the industrial arts that men are willing to think and to work, even though they are prompted wholly or in part by selfish motives. Realizing that a hope of financial reward serves to encourage inventive genius, the United States in common with all other civilized nations permits inventors and authors to enjoy a monopoly of their products. Practices vary from country to country, though the principle involved is the same in all cases.

Patent law of the United States. — The law under which patents are now issued in this country states that " any person, native or foreign, who has invented or discovered any new and

useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof, not known or used in

NUMBER OF PATENTS ISSUED BY YEARS: 1895–1917.



this country, and not patented or described in any publication in this or any foreign country, before his invention or discovery

thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned, may upon payment of the fees required by law and other due proceedings had, obtain a patent therefor." The law further states that the inventor may have for a period of seventeen years the exclusive right to manufacture and sell his invention. Infringement of a patent gives the inventor just cause for appealing to the courts for protection and redress.

Copyright law. — In principle a copyright resembles a patent. Each is the basis of a temporary monopoly. The most common copyrighted productions are books. Songs, pictures, magazines, and even news items may also be copyrighted. As in the case of patents, infringement is punishable by law. A copyright runs for twenty-eight years, though the author or his direct heirs may get an extension of fourteen years. No large per cent of copyrights is ever extended, however, for the sale of a book is likely to cease within a few years after it is first issued. Books written in foreign countries may now be copyrighted in the United States, though for years this privilege was refused; and this refusal accounts in large measure for the hostility of Charles Dickens and other English writers toward America.

Trade-marks. — In registering a trade-mark the government grants to the owner its exclusive use in marking certain commodities. Whether or not it will ever possess any value depends entirely on the owner's ability to create for it good will in the minds of the buying public. If he succeeds, it becomes the basis of a profitable business. The monopolistic character of the trade-mark accounts in large measure for one of the most important tendencies in present-day marketing — the increase in the number of nationally advertised products. Without its protection producers could not afford to create a demand for particular brands, for they would have no assurance that unscrupulous competitors would not flood the markets with a

substitute bearing the same label, nor would consumers be able to choose the product of the original producer. Hence the trade-mark establishes a bond between the producer and the consumer, which the producer cannot afford to break by lowering the standard of his product. Consequently, we may say, trade-marks protect consumers to a large degree from imposition.

Objections urged against the present patent law. — In spite of the obvious benefits that arise from granting monopolies to inventors, there are those who argue that better results could be obtained by withdrawing government protection from all such enterprises. This argument is based on the assumption (1) that genius does not need a financial stimulus; (2) that the reward arising from this form of monopoly usually goes into the pockets of unscrupulous manufacturers who make a practice of overreaching inventors; (3) that patents serve as the basis of objectionable industrial monopolies; and (4) that patents are often bought by owners of similar, but inferior, patents merely in order to suppress them.

43. Regulation of Industrial Monopolies

The early trusts. — The years following the close of the Civil War saw in many lines a bitter struggle for business, which produced cutthroat competition and consequently a loss of profits. The natural result was combination. In 1879 the *first* trust, the Standard Oil Company, was organized under the guidance of John D. Rockefeller. The plan of organization provided that the owners of numerous small oil refineries located in Ohio, Pennsylvania, and New York should place their stocks in the hands of nine trustees in exchange for *trust* certificates. These trustees carried on all the business of the various interested refineries as if it were the business of one large concern. So successful was this plan that other groups of in-

dustries took it up, notably the manufactures of whiskey and of sugar. Between 1890 and 1892 several of the state courts declared such combinations to be illegal and ordered them to dissolve. This was the end of the trusts proper, though the term has continued down to the present time to designate concerns supposed to possess monopolistic advantages.

The trust movement. — The dissolved sugar trust immediately reorganized into one gigantic corporation under a New Jersey charter. The oil trust followed a different plan. Mr. Rockefeller and his associates, having secured control of the more important refineries that had composed the old monopoly, carried on the oil business down to 1899 very much as a single organization would have conducted it. In that year the refineries were merged into a single large corporation, the Standard Oil Company of New Jersey. Both reorganized concerns (the old oil and sugar trusts) succeeded so well as to cause other enterprisers to investigate the advantages of combining their respective lines. By 1898, it has been estimated by a good authority, eighty so-called trusts, with an aggregate capitalization of $1,000,000,000, had been formed. During the next six years the movement went rapidly forward. At the beginning of the year 1904 the number of trusts exceeded 300, and their combined capital stock exceeded $5,000,000,000. By far the largest was the United States Steel Corporation, which boasted a capitalization in excess of $1,400,000,000. In time, as we might suspect, practically every productive industry in the country was combined. The effect on investments was important. Capitalists and bankers, even the most conservative among them, came to feel that the risks involved in trust investments were negligible. Small investors caught the feeling. The result was a rush to buy stocks and bonds. The failure of the ship-building trust, however, awakened the investing public to the realization that the risk attached to the

purchase of stocks and bonds of industrial trusts was greater than they had anticipated.

Popular feeling aroused against the trusts. — The rise and development of the trust movement was caused and accompanied by a general rise in the prices of goods, which began about 1896. The public soon saw the rise in prices, and very naturally they attributed it to the trust movement. They were encouraged in this belief by independent concerns which had felt the weight of the combinations, also by various groups of persons who sincerely believed that the movement was a menace to the best interests of American society. More influential than either of these was the designing politician who saw in the growing hostility of the people toward the trusts an opportunity to further his own interests. Accordingly, he and his kind went up and down the country preaching a crusade against what they delighted to call the " unholy alliance " of capital. It cannot be denied, however, that the trust development threatened the best interests of society, nor that the people needed to be aroused to their danger. And it is pleasant to record that the people when aroused went about the task, somewhat blunderingly perhaps, but in a spirit of justice, to purge the trusts of their evil features.

Evil practices of the trusts. — The most outstanding objection which the people had to trusts was based on their treatment of independent competitors. For years it was the common practice of the Standard Oil Company, as we have already seen, to secure lower freight rates than its competitors, thus placing them at a decided disadvantage in the matter of competing with the trust in the sale of oil products. Other combinations, notably the sugar trust, likewise secured discriminatory rates from the railroads. Second, the trusts in an effort to crush competition had a practice of lowering prices in competitive markets, and of recouping themselves by higher prices in the

markets where they had no competition. Both these practices the people condemned on the ground of fair play. They demanded that the trusts, while they might be entitled to the economies that arose from conducting business on a large scale, should not use unfair methods to crush their small rivals.

Trust regulation. — The first attempt by the national government to curb the monopolistic powers of the trusts came even before the trust movement proper had got under way. The practices of the old Standard Oil Company operated by its nine trustees had created suspicion in the minds of the people. Soon this suspicion was changed to distrust. Then a demand arose for some sort of regulative legislation. The result was the Sherman Anti-Trust Law of 1890. This law declared illegal "every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several states, or with foreign nations." It also declared it to be unlawful for any person to "monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several states, or with foreign nations." The essential feature of the law was its prohibition of the *restraint* of trade.

This law, as we have seen, was designed primarily to curb the illegal activities of the trusts. Yet during the first twenty years of its existence it failed signally to fill the want for which it had been designed. Suits were brought under the act; yet few juries were found that could distinguish between *reasonable* and *unreasonable* restraint of trade. Strangely enough, one of the suits successfully prosecuted was directed against a Connecticut labor union for restraining the trade of a firm of hatters. Finally in 1910 the government succeeded in having both the Standard Oil Company and the American Tobacco Company dissolved. The success of the government in these cases encouraged the Department of Justice to in-

stitute other suits. Four years later a new act added strength to the original anti-trust law by making some of its provisions more definite.

The Clayton Anti-Trust Law, enacted in 1914, exempted labor unions and farmers' coöperative associations from anti-trust prosecution. It declared illegal certain practices of one corporation owning stock in another corporation, and expressly forbade "unjustifiable discriminations in the prices charged to different persons." During the same year a federal trade commission was established with power to prevent discriminations in commerce, to make reports, and to investigate, at the request of the attorney general, alleged violations of the anti-trust laws.

Significance of government regulation. — The interference of the government in industry is a radical departure from the older notion that business should be free from all state regulation or oversight. Radical as it is, the change from *laissez faire* back toward mercantilism came in response to the demand of society that it be protected from its most powerful industrial members. Just what effect the various anti-trust laws and the court decisions based on them have had on production, it is impossible to say. And because of this very uncertainty, caution and care must be exercised by the government in diverting enterprise from one channel to another. Moreover, government regulation and government interference, let us remember, are likely to be the first steps toward government ownership.

44. Regulation of Public Utilities

Early experiences. — Our notice of the monopolistic character of public utilities in discussing the nature of monopolies paves the way to an examination of the methods designed by the state to regulate them. Early in the history of the water,

gas, and electric lighting industries the government exerted little control in the regulation of their rates and services. Much like the railroads, these industries undertook to conduct their business with little regard to the welfare of the people whom they served, and here again, as in the case of the railroads, the people found it necessary to impose regulations in order to protect their own interests, and, strange as it may sound, the interests of these industries. In many sections of the country the public was not easily aroused. To many the difference between a five-cent and a four-cent street-car fare was insignificant. Yet in the aggregate it mounts high. Likewise, an eleven-cent electric rate appeared to be little more than a ten-cent rate. The corporations themselves sensed the danger, but instead of correcting existing evils many of them tried to fortify their position by packing city councils with employees or friends of the management. As a result, the record of more than one American city is besmirched with every form of petty manipulation, with lobbying, and even with bribery. Fortunately, the good judgment of the people led them to see that they were the masters of the situation. The result was, and is, that conditions surrounding the services of public utilities corporations are much better than the most optimistic would have predicted a few years ago.

Form of regulation. — In the matter of regulation each city may take one of two courses. It may by an ordinance, as is usually the case, set the maximum which a given system may charge for public service; or it may own and operate the system, thus securing for the city treasury any excess which under the other plan would go into the pockets of individuals. Ownership, on the whole, has been confined to water service, though many of the smaller cities and towns operate their own lighting systems, and some even operate their own gas plants. In a few of the larger cities, the public has an interest in the local

street-railway system. In Chicago, for example, the city shares in the profits of carrying passengers on the surface lines.

Even those who have objected the most strenuously to the regulation of industrial corporations have expressed sympathy with the regulation of municipal service plants. This regulation, however, is beyond the discussion stage; nevertheless, as intelligent members of society we must give attention to the best methods of regulation.

45. Fixing Prices

Nature of the problem. — This movement, toward what many call socialism, manifests itself almost exclusively in the regulation of railroads, public utilities, and trusts. We have had little experience in fixing prices except when placed under the stress of war. Obviously, no one, not even the government, can anticipate with any degree of accuracy the demand for a given article. And just as obviously, no one can estimate the probable future supply of such a product as corn or wheat or cotton. Since neither the demand nor the supply can be determined in advance, the fixing of a proper price is a difficult task. Not long ago a government official went to the heart of the matter when he said that the wisdom of fixing a wheat price at a certain point could be determined only after the new harvest had begun to come on the market. If the price had been too high, a surplus of the old crop would remain unsold; if too low, the old crop would have fallen short in supplying the demand. Allowing for other influences, there is much truth in the statement.

Experiments. — Under the stress of the Great War the United States government undertook to set prices on numerous articles of everyday consumption. The price of wheat was set at a figure double the average price for a term of years preceding the outbreak of the war. Immediately the price of corn began to rise, partly on account of the high price of wheat. Then

wheat-growers demanded a higher price for their product on the ground that they could make more money raising corn. Here we have the inevitable result of trying to fix an arbitrary price; and undoubtedly the difficulty explains why modern society hesitates, except under the most extraordinary circumstances, to say what a producer shall receive for his product.

EXERCISES AND PROBLEMS

A

1. What are the chief features of the United States patent laws?
2. Point out the good and the bad phases of the patent system.
3. What is the value of a trade-mark to the producer? to the consumer?
4. How does a copyright differ from a patent?
5. What is a trust?
6. Are all trusts monopolies?
7. Are all monopolies trusts?
8. Why did the trust movement develop so rapidly about 1900?
9. What caused popular opinion to be aroused against the trusts?
10. What were some of the objectionable practices of the trusts?
11. What was the Sherman Anti-Trust Act?
12. How did this law affect the trusts?
13. How has this law been strengthened?
14. What is the difference between *reasonable* restraint of trade and *unreasonable* restraint of trade?
15. Why were early public utility corporations given so many privileges?
16. Just how at the present time are these corporations usually regulated?
17. What experience has this country had in price-fixing?
18. Why is price-fixing likely at all times to be unsatisfactory?

B

1. What steps would you take in securing a patent?
2. Make a short list of important inventions that have revolutionized American life and industry. Were these inventions patented? Which

of the patentees has been rewarded adequately for the labor and skill employed in perfecting his invention?

3. Mention twenty trade-marks with which you are familiar.
   a. Would you consider them as assets of the concerns which own them? Why?
   b. What similarities have you noticed in the trade-marks carried by the same kinds of goods?
   c. Why do business firms often retain the names of members who have died or withdrawn?
4. Just how widespread is the practice of securing copyrights?
   a. How can you determine whether or not a publication is copyrighted?
   b. Is this book copyrighted? What is the evidence?
   c. Make a list of ten books or other publications not copyrighted.
   d. Are copyrights owned by publishers or authors?
5. Name ten concerns which you would class as trusts.
   a. How many of the ten are manufactures?
   b. Which of these appear to be monopolies?
   c. Which, if any, have resorted to unfair competition? Explain.
   d. What is the general attitude of the people toward them?
6. Make a list of the public utility enterprises in your community.
   a. Which of these are publicly owned?
   b. Which are monopolies?
   c. Why does society permit monopolies in these enterprises?
   d. To what extent are these enterprises regulated by law?
   e. Is this regulation as effective as the regulation that would arise from competition? Explain.

C

1. "Some people deny that men who have a genius for invention and discovery require any special inducement to follow their natural bent."
   a. Just how does a genius differ from other persons?
   b. Do all inventors have a genius for invention?
   c. Might genius be stimulated by a hope of reward?
2. Why are goods sometimes advertised, "Not made by a trust"?
3. During the early years of the trust movement the argument was frequently heard that the trust excelled all other forms of business organization in efficiency and economy.

a. What is the basis of that argument?
b. In what respects are trusts more efficient:
  i. In organization?
  ii. In buying? in selling?
  iii. In transportation?
c. What is the relation between this increased efficiency and prices?

4. Because of increased costs of labor and material a street-railway president finds that a five-cent rate does not bring a fair return. How would he proceed to secure a six-cent rate?

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PART IV

THE EXCHANGE OF ECONOMIC GOODS

CHAPTER XV

USE OF MONEY IN MAKING EXCHANGES

46. Characteristics of a Good Money

The process of selection. — The universal use of certain commodities for money rests on social experience, and not, as many believe, on some fine-spun theory evolved by statesmen and the law courts, that in making exchanges one commodity *ought* to be preferred over another. Among the early Jewish patriarchs, cattle and sheep were regarded not only as wealth, but also as *measures* of wealth. Homer, the Greek poet, speaks of the wealth of the Greeks in terms of cattle. Our own American Indians employed shells in making exchanges among themselves; some African tribes use cubes of salt as money; while in the interior of Russia tanned hides at one time circulated as a medium of exchange. Slowly, but obviously not in the same period of time, each independent society, employing the selective process in making its choice, has experimented with various commodities as money.

Value characteristics of good money. — Clearly the chief characteristic which any commodity must enjoy, if it is to become a medium of exchange, is *use value;* that is, society as a whole must value it highly enough to desire to possess it for its own worth and not because some individual or some government has said that it possesses value. Since it has value it will have acceptability — that is, it will be desired by the individual members of society. If the members of any social group prefer

cattle, for example, to all other forms of wealth, then cattle, *other things being equal*, naturally become the medium of exchange.

Notice that the last statement in the preceding paragraph bears the qualification, "other things being equal." Cattle might have a wider acceptability than furs, and yet, on account of their small value compared to thei large bulk, be less desirable as a money. Diamonds, on the other hand, might also be the most highly and the most widely desired commodity in existence without becoming a medium of exchange, simply because a diamond possesses too much value compared to its size. Also the value of the commodity which is to serve as money must be reasonably stable — that is, its value must not vary too widely or too quickly. We may conclude, therefore, that the value characteristics of a good money are three in number: (1) value, (2) reasonably large value in small bulk, and (3) stability of value.

Physical characteristics of a good money. — Scarcely less important are the *physical* characteristics which a good money should possess. Five such characteristics may properly be examined at this point: (1) durability, (2) portability, (3) homogeneity, (4) divisibility, and (5) cognizability.

Any commodity that is to serve well as money should possess durability to a high degree. Otherwise it would wear quickly in its passage from hand to hand, and even deteriorate while in the possession of its owner. Consequently, perishable goods, such as cattle, furs, tobacco, and even wheat and corn, have never proved satisfactory as mediums of exchange. Clearly, durability is a great aid to stability of value, since the *new supply* of a durable commodity for a reasonably short period of time is likely to be small compared to the entire stock of that commodity already in the possession of society. If wheat, for example, were used as a medium of exchange, it is obvious that

its value would fall greatly with the harvesting of each new crop and rise as each crop was gradually consumed.

The second physical characteristic of a good money is portability. The commodity that serves as money must be moved from point to point, among the members of the society that uses it. Otherwise it is not money. This movement involves labor and expense. Hence, the commodity that combines greatest value in the smallest bulk, *if we consider portability alone*, is the most desirable as a medium of exchange.

A good money must also be homogeneous — that is, the commodity from which it is made must be of the same quality wherever it is found. Obviously, cattle possess this characteristic to a very low degree, for scarcely any two of them are alike. Divisibility, which is closely related to homogeneity, simply means the capability of a commodity to be divided without destroying its value. Here again, cattle do not possess this characteristic. Neither do furs or diamonds. Either loses value by being divided. The total value of the parts of a split diamond never equals the value of the original stone.

Any commodity that is to pass current as money must be capable of being easily recognized. Otherwise it could be counterfeited, which fact in itself would tend to destroy its value as a money by destroying its acceptability.

Characteristics of gold. — Of all the commodities known to mankind gold possesses in the highest degree the characteristics of good money. Since the earliest time it has been desired for its own use as a commodity. Primitive man prized gold above all other metals. From it he made rings, chains, and other ornaments that appealed to his vanity. His descendants regard gold in much the same way. Gold is also scarce enough to make it highly valuable compared to its bulk, and yet it exists in large enough quantities to permit of its use in making exchanges. Finally, the value of gold is stable, though we must not get the

mistaken idea, which some have, that it does not vary. The reason for its stability is that the supply of the metal coming from the mines, in any year let us say, is extremely small compared with the total supply in the possession of society.

Gold possesses also to a high degree the *physical* characteristics of a good money. It is made durable by combining with the fine metal a small part of alloy. Gold wears well in coins, though it is best preserved by molding it in the form of bars. Also since it combines a relatively high value with small bulk, gold may be easily carried about. The homogeneity of gold is well known to every student of chemistry, who learns early in his course that it is a chemical element. All fine gold, therefore, is exactly alike, whether it be mined in South Africa or in Alaska. Gold is also divisible. No change in its shape or form affects its value. Two one-ounce pieces of gold are worth exactly as much as one two-ounce piece. Melting, rolling, or pounding has no effect whatever on the value of fine gold. Fifth, gold is the most difficult of all the metals to counterfeit. Any one accustomed to handle gold money can detect a spurious gold coin at a glance.

From the foregoing discussion of the qualities of a good money we can easily see why society has, by a long process of selection, chosen gold as a standard. It could not have done otherwise. Whether or not gold will continue down to the end of time as the money standard, no one can say. We are reasonably sure, however, that a change to some other commodity will come only when that commodity shows its superiority to gold.

47. Uses of Money

As a medium of exchange. — The general desire for a commodity, such as gold, stimulates its acceptability in unlimited amounts, since each individual knows that his neighbors will

gladly accept it in exchange for their surplus commodities. Such a commodity, whatever it may be, we call money. As soon as a society reaches the money stage of economic development its exchanges are greatly facilitated. No longer is it necessary for an individual who desires, let us say, to exchange a deerskin for a hat, to go about among his friends seeking another individual who has not only an extra hat but also a desire to possess a deerskin. Instead, he deals with two different individuals, exchanging his deerskin for money, and carrying the money in his pocket until he finds some one who has a hat for sale. In one respect money is a universal *mobilizer* of goods — that is, it gives mobility to the exchange of goods. If we were deprived of its use, a large part of the energy now expended in producing goods would necessarily have to be expended in bringing together traders possessing mutual demands.

As a standard of value. — Money serves also as a standard of value. It is a common denominator to which all other values may be reduced. We speak of wheat as being worth two dollars a bushel, meaning thereby that two dollars exchange for a bushel of wheat. Similarly we speak of corn being worth a dollar a bushel, oats fifty cents a bushel, and eggs twenty-five cents a dozen. Here we have but *four* facts to remember, the prices of the four commodities under consideration expressed in a money unit. Without the use of money the number of relative values possible to express among the four commodities would be as follows:

One bushel of wheat = two bushels of corn = four bushels of oats = eight dozen eggs.
One bushel of corn = two bushels of oats = four dozen eggs.
One bushel of oats = two dozen eggs.

Expressed in the form of a ratio the relative values to remember would be:

Wheat : corn :: 2 : 1.	Wheat : oats :: 4 : 1.	Wheat : eggs :: 8 : 1.
	Corn : oats :: 2 : 1.	Corn : eggs :: 4 : 1.
		Oats : eggs :: 2 : 1.

Thus it is to be seen that there are *six* barter relations, whereas but four appear when money is used. As the number of commodities increases, the advantage of employing a money unit becomes more evident: ten different commodities, having a total of ten different values expressed in money, have *forty-five* relative values when expressed in terms of each other.

One of the curious things about a money unit is that the unit itself does not necessarily have to exist. The money unit of the United States is the gold dollar (23.22 grains of fine gold), yet at the *present time* the government does not coin gold dollars. Furthermore, prices would not differ in the least from what they are, had no gold dollars ever been minted. Thus, the disappearance of every gold dollar in existence would affect not in the least the money unit of the United States.

As a standard of deferred payments. — Since money serves so well as a medium of exchange and as a measure of value, it is but natural that credit transactions should be expressed in the same unit. An enterpriser, wishing, for example, to secure a new machine, borrows not a machine, but money with which he can purchase the machine. Nor does he expect a year hence to repay the loan with a machine. He borrows money and he repays money, both he and his creditor having every assurance that the entire transaction will be carried out in terms of the same unit.

Another reason why money is usually preferred as a medium of credit transaction is because of its stable value. As we shall see in a later chapter, all money, including gold, fluctuates in value, yet this fluctuation is likely to be relatively small

for a reasonable period of time. Both debtor and creditor, then, enjoy a reasonable protection when money is the medium by which debts are to be discharged. Suppose A borrows ten bushels of wheat from B, agreeing to return to him at the expiration of one year the ten bushels plus interest. A bumper crop of wheat, accompanied by a large decrease in price, would obviously give A an undue advantage in repaying his loan. Conversely, a short crop of wheat would give B a corresponding advantage. No such fluctuation, we may say with assurance, will occur in the value of gold.

48. Kinds of Government Money

Gold. — The standard money unit of the United States is the gold dollar, weighing 25.8 grains and comprising nine parts of fine gold to one part of alloy. Other gold coins are double eagle ($20), eagle ($10), half-eagle ($5), and quarter-eagle ($2½). All other forms of our money are directly or indirectly convertible into gold. Any holder of gold bullion, nine-tenths fine, can exchange it at the mint or other proper government depository for an equal amount of gold coin without charge. Hence we speak of the free and unlimited coinage of gold, free in this case literally meaning gratuitous; that is, a holder of bullion can present 258 grains of standard gold and receive in return a ten-dollar gold piece.

Inasmuch as the standard coin is made of gold, it necessarily follows that the *price of gold cannot vary* as long as that standard is maintained. Thus, the miner, who carries standard gold bullion to the mint, finds by a simple calculation ($480 \div 25.8$) that the price of his product is $\$18.60^{+}$ an ounce. This price has not varied in many years, and it cannot vary as long as the present law regarding the standard coin is in operation. By exchanging gold coins for an equal amount of gold bullion of the same fineness, the government maintains a parity between gold

coin and gold bullion. In other words, the government adds no value whatever to gold bullion by converting it into coins. It merely changes the bullion into convenient forms for making exchanges, indicates each coin's weight by stating its value, and undertakes to prevent counterfeiting. Since neither the changing of bullion into coin nor the changing of coin into bullion has any effect on the value of gold, there is, as we might expect, a constant flow in both directions: mine owners and gold importers carry their bullion to the mints, while gold exporters change gold coins into gold bars. Thus, the government mints, on the one hand, and the melting pots of private individuals, on the other, perform the valuable service of keeping gold coin and gold bullion equal in value.

Silver, copper, and nickel. — The United States government mints also several different kinds of silver coins — dollars, half-dollars, quarter-dollars, and dimes. The silver dollar, which, as we shall presently see, was at one time a standard alongside the gold dollar, is composed of nine parts of fine silver to one part of alloy — that is, it is nine-tenths fine. It weighs 412.5 grains, of which 371.25 grains are fine silver. The silver dollar, like all gold coins, is an unlimited legal tender for all debts. This simply means that a debtor may, unless there is a contract to the contrary, discharge his debts in silver dollars. The other three silver coins have the same fineness as the silver dollar, but do not weigh as much in proportion as their exchange values indicate. Two half dollars do not weigh as much as one dollar; neither do four quarters nor ten dimes. These subsidiary coins are legal tender up to ten dollars. The legal-tender quality of the nickel piece and the copper cent is limited to twenty-five cents.

Representative money. — Closely akin to the standard gold dollar and to the one-time standard silver dollar are the two forms of representative money used in the United States.

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HOW SILVER DOLLARS ARE STORED IN THE UNITED STATES TREASURY.

One, the *gold certificate*, is issued by the government to take the place of exactly the same amount of gold deposited in the treasury. Similarly, the second form, the *silver certificate*, represents deposits of silver. The chief reason for substituting the former for gold coin is to save the wear and deterioration which gold suffers in passing from hand to hand. The silver certificate, while it also serves to save wear on silver coins, is issued largely because it is much more convenient to handle than silver. The main point to notice in connection with gold and silver certificates is that holders may exchange them at the United States treasury for gold or silver, as the case may be. In other words, representative money merely represents gold or silver which the government keeps in trust for its holders.

AN ACCOUNT OF RESUMPTION, FROM CONTEMPORARY NEWSPAPER.

RESUMPTION.

Peace from the Placid Potomac to the Warbling Wabash.

COIN IN ABUNDANCE EVERYWHERE, AND IN BUT LITTLE DEMAND.

More Gold Received at the New York Sub-Treasury Than Paid Out.

Reports from Philadelphia, Chicago, St. Louis, and Many Other Points.

GENERAL FEELING OF CONFIDENCE FOR A REVIVAL OF BUSINESS.

SPEECH OF HON. JAMES A. GARFIELD AT CHICAGO, ON HONEST MONEY.

CINCINNATI.

Resumption resumed yesterday, and nobody seemed hurt by it. There was about as much stir over it as as though it was Lot. Theodore Cook remarked that it might as well have happened six months ago. The Merchants' National Bank didn't have a call for a dollar of gold. The Third National paid out a solitary twenty-dollar gold piece. There was no demand at the National Bank of Commerce. The First National paid out $97 50 in the yellow coin.

Government credit money. — Somewhat different from representative money is the credit money of a government, which is backed not by an equal amount of gold or silver, but by a *reserve* fund *plus* government credit. The credit money of the United States government is *United States notes*, popularly referred to as greenbacks. These notes were first issued during the Civil War and are legal tender in unlimited amounts. For seventeen years their value in terms of gold fluctuated from forty cents to one hundred cents on the dollar. That is, they varied from a high point where they equaled gold in value to a low point where a dollar note was worth but forty cents in gold. Finally in 1879, after a four years' preparation, the government began to redeem these notes in gold, dollar for dollar. This is known in our financial history as the *resumption* of specie payments. Since that time they have circulated on a par with gold, simply because every one knows that he can exchange them for gold at the treasury.

Since the government does not maintain a dollar in gold for every dollar of notes, the question may properly arise how the government is able to redeem them on presentation. The answer involves the whole basis of credit, which is *confidence*. The people, firmly believing in the integrity of the government, have confidence that it can redeem every note on demand. Consequently, no one presents notes for payment unless he has some special need for gold. They are in very much the same frame of mind as the bank depositor who, hearing that his bank was about to fail, demanded to withdraw his deposits. On being assured that the bank was solvent he merely remarked that if the bank had the money to pay him he did not want it; if it did not, he wanted it at once.

Three kinds of bank notes also circulate widely in the United States, but a detailed notice of them must be deferred to a later chapter.

EXERCISES AND PROBLEMS

A

1. Name various commodities that have served as money.
2. What must be the chief characteristics of a good money? Why?
3. What is meant by the expression, "large value in small bulk"?
4. Would diamonds serve well as a medium of exchange? Why, or why not?
5. Name and explain the *physical* characteristics of a good money.
6. Discuss the characteristics of a good money as applied to gold.
7. Why is gold the most generally accepted of all money?
8. What are the uses of money?
9. What are the advantages of money exchange over barter exchange?
10. What is the standard coin of the United States?
11. Is the ten-dollar gold piece a standard coin? Explain.
12. Does the *value* of gold fluctuate? Explain.
13. Does the *price* of gold fluctuate? Explain.
14. Why is it not unlawful to melt gold coins?
15. Name the different silver coins in circulation.
16. Are any of these coins standard money? Explain.
17. Why is alloy used in the coinage of gold and silver?
18. Why are gold and silver certificates called "representative" money?
19. Why are these certificates used in the place of coins?
20. What are "United States notes"?
21. Why are these notes usually referred to as "greenbacks"?
22. Why did the value of greenbacks fluctuate during the Civil War?
23. Why has it not fluctuated since 1879?
24. Is the government prepared to redeem all greenbacks on demand? Why, or why not?
25. Why are relatively few greenbacks presented for redemption?

B

1. Give instances of where you have used money as a medium of exchange; as a measure of value; as a basis of credit.
2. Make a collection of silver coins both new and worn.
   a. Weigh each of the dollars.
      i. What does the new dollar weigh?
      ii. Compare it with the weight of the worn dollar.

b. Weigh each of the other coins.

i. How does the weight of the new half-dollar compare with the weight of the new dollar? the new quarter? the new dime?

ii. Compare weights of new and worn fractional coins.

c. Which coins show the greatest proportionate wear?

3. Get permission of some banker to examine gold coins, gold certificates, silver certificates, and greenbacks.

a. Note various denominations of each.

b. Are there denominations higher or lower than the ones examined?

c. What are the legal-tender qualities of each?

C

1. Suppose the federal government should decide to make a bushel (56 pounds) of shelled corn the standard money unit:

a. Would gold be robbed of its value? Why, or why not?

b. What difficulties would be encountered:

i. In preventing wide fluctuations in value?

ii. In standardizing the new money unit?

iii. In transporting money?

iv. In storing money?

c. How would the demand for representative money be affected?

d. How would the production of corn be affected?

e. Would an Iowa corn farmer be richer or poorer as a result of the change? Why?

2. Suppose the federal government should decide to change the money standard, displacing the gold dollar of 25.8 grains (nine-tenths fine) by a gold "diller," of equal fineness, weighing 40 grains.

a. How would the *amount* of gold money in circulation be affected?

b. How would the value of gold be affected?

c. Would the price of gold be changed? How?

d. What would be the effect on the prices of commodities?

e. How would gold mining be affected?

3. A well-known public man asserted a few years ago that anything would serve acceptably as a money if it bore the government *fiat.*

a. Have governments been successful in creating an artificial currency?

i. What was "Continental paper money"?
ii. Sketch briefly the history of the greenbacks.
iii. What served as money in the Southern Confederacy?

b. How much value does the government stamp add to gold coins?

c. What causes gold coins to circulate?

d. What causes greenbacks to circulate?

4. "Representative paper money is not money at all; it merely represents money held by the government."

a. Define "money."

b. Does an exchange of a ten-dollar gold certificate for a ten-dollar gold coin change the amount of money in circulation? in the treasury?

c. Suppose the government should spend the gold held to redeem gold certificates:
i. Would they still be "gold certificates"? Explain.
ii. Would they be money? Why, or why not?
iii. How would their value be affected?

d. Suppose the government should declare gold certificates to be redeemable like greenbacks:
i. Would they still be "gold certificates"? Explain.
ii. How would their value be affected?
iii. How would the value of greenbacks be affected?
iv. What would be the effect on government credit?

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CHAPTER XVI

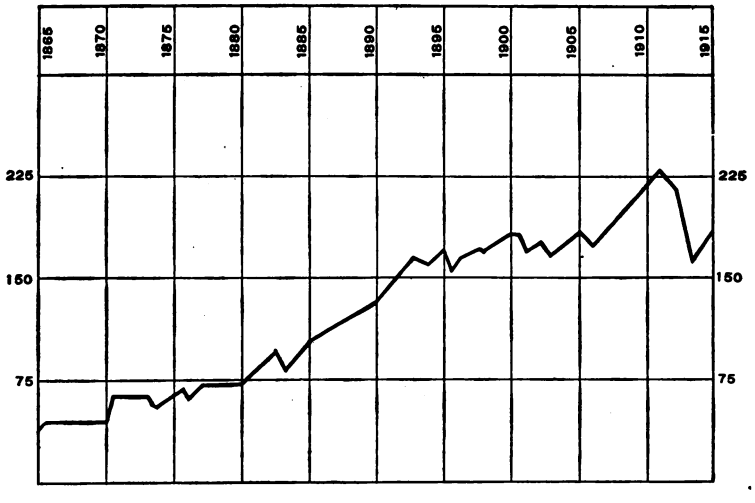
MONETARY LAWS ILLUSTRATED FROM THE HISTORY OF THE UNITED STATES

49. Some Important Monetary Laws

The bimetallic ratios. — Until a comparatively recent period bimetallism prevailed among the more advanced industrial nations — that is, they employed both gold and silver money standards. Each government authorized its mints to manufacture the standard coin in either gold or silver, their relative weights depending on some previously determined ratio, which hereafter we shall call the *mint ratio.* Obviously, at the same time there was also a *market ratio* between these metals, just as there is always a market ratio between wheat and corn, which no government can effectively control. Thus, the government could fix one ratio but not the other. Accordingly, the two ratios were seldom the same. An influx of gold into any country tended to cause the value of that metal, as compared with silver, to fall, while an outflow of gold tended to cause its value to rise. In the first case gold was said to be overvalued; in the latter, undervalued. Both terms, as used in discussions on bimetallism, create unnecessary confusion, which any one of us, by exercising a little caution, can avoid. Both terms apply to the value set by the mint. If an oversupply of gold causes, as we have seen, the value of that metal to decline in the markets in terms of silver, then at the mint, where the ratio remains constant, it is obviously overvalued. Similarly, an undersupply of gold causes it to be undervalued at the mint.

To give concreteness to our subject let us assume that a government fixes the mint ratio at 15 to 1, which means that the standard silver coin shall weigh exactly fifteen times as much as the standard gold coin, the two coins having the same fineness and the same legal-tender value. If in the market of that country an ounce of gold will buy twenty ounces of silver,

WORLD PRODUCTION OF SILVER: 1865-1915
(In Millions of Ounces).



then it is clear that gold is undervalued at the mint; and that silver is overvalued. Conversely, if an ounce of gold exchanges in the market for less than fifteen ounces of silver, fourteen say, then silver is said to be undervalued and gold overvalued. The inability of any government to change its mint ratio to correspond with the daily shifting market ratio accounts in large measure for the difficulties encountered in trying to maintain a bimetallic standard, and for its abandonment, as practically all of the leading countries have done.

Gresham's law. — Under a system of bimetallism the coins made from the undervalued metal tend to go out of circulation. The reason for this is not difficult to understand, since the undervaluation of a metal means that it has higher value in the market than at the mint. Payments will be made preferably with the coins of the overvalued metal; with the result that the coins of the other metal will be used only as a last resort. Thus, when coins of two standard metals circulate side by side, the coins which are worth *less* as metal than as money will tend to drive out of circulation the coins which are worth *more* as metal than as money. The same tendency occurs when similar standard coins are circulating, if some of them are worn more then others; also when metal money and paper money circulate, if the paper money is depreciated. We are now prepared to state what is generally known as Gresham's law, named after one of the advisers of Queen Elizabeth: *When two kinds of money circulate concurrently, the poorer tends to drive the better out of circulation.* An American writer puts it forcefully when he says that good money is too proud to circulate alongside poor money.

Principle of elasticity of money. — A third important monetary law involves the relation of the supply of money to the fluctuations of the demand made on this supply. In every modern business community there is more or less of a seasonal demand for money in some form. Particularly is this true in agricultural sections at harvest time. Then farmers hire additional laborers who must be paid, and incur other expenses incidental to harvesting. In a large country such as the United States this seasonal demand mounts into hundreds of millions of dollars. Clearly, business operations cannot be adjusted so as to have on hand this enormous sum of money to meet the extra demands of a few months at most. And it need not be so adjusted if some provision is made, such as we now have in our

Federal Reserve Banking Law, for increasing the amount of money to meet an additional demand and decreasing it again when this demand has passed by. A monetary system which permits of this expansion and contraction is said to be *elastic.*

From our description of elastic money we readily see that credit money alone, either in the form of bank notes or of government notes, serves the purpose. No reasonable scheme can be had which would permit metallic money to stretch and contract with the fluctuation of business needs. Mine production could not be speeded up sufficiently to meet an increased demand; and if such were possible we can think of no plan for taking the added amount out of circulation when there was no longer need for it.

Quantity theory of money. — Whatever the permanent supply of money may be, it will adapt itself to the social needs for money. A given quantity of money, say $10x$, effects the exchanges of a country. If this quantity were increased to $12x$, we know, speaking generally, that the new amount ($12x$) will be used in effecting the same kinds and number of exchanges as $10x$ had formerly effected. Thus, in each exchange twenty per cent more money will be used than was the case before the increase — that is, goods in every case will command more money when the quantity is $12x$ than when the quantity was $10x$. Measured in terms of goods, the value of money has declined. We may now state the quantity theory of money: *Other things being equal, the value of the money unit varies inversely with the supply of money.*

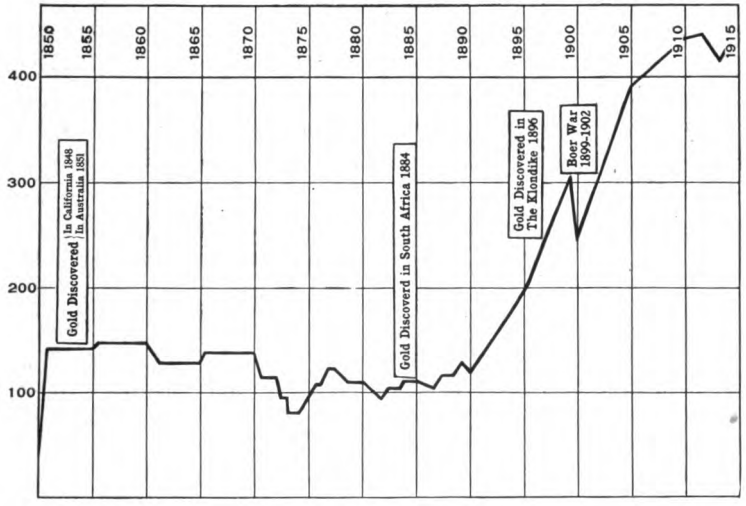
50. Monetary History of the United States

Notes of the first and second United States Banks. — During the greater portion of the first half century following the organization of the national government in 1789, the notes issued by the two United States Banks (first, 1791–1811;

second, 1816–1836) supplied the most important part of the country's circulating medium. Each bank kept an adequate reserve of coin with which to redeem its notes. Consequently, the people accepted them at their face value. Numerous state banks also issued notes, which usually had scarcely more than a local circulation in the neighborhood of the issuing bank.

Government coinage. — Very soon after the organization of the first United States Bank, the government provided a

World Production of Gold: 1850–1915
(In Millions of Dollars).



bimetallic coinage system (1792) in which the ratio was to be 15 to 1. For many years after its establishment the mint coined comparatively little silver or gold: there were few mines in the country, foreign coins passed current, while the United States banks, as we have seen, provided a sound and uniform currency. In 1834 the mint ratio was changed to 16 to 1. All

the while the market ratio was in the neighborhood of $15\frac{1}{2}$ to 1. Hence, the first coinage law (1792) undervalued gold; the second (1834) undervalued silver. Neither law, despite the best efforts of the lawmakers, caused gold and silver to circulate side by side. The holder of either metal — coin or bullion — followed his own economic advantage; he paid out his overvalued coins and sold or exported his undervalued ones. Since the law of 1834 tended to drive silver out of circulation by undervaluing it, the fractional silver coins (half-dollar, quarter-dollar, and dime) disappeared. Consequently, in 1853 the weights of these coins were slightly reduced in order to make them worth more as money than as bullion. Since that time the weights of all our gold and silver coins have remained unchanged. The discovery of gold in California in 1848 gave an impetus to gold coinage. A little later the mints were turning out gold coins in excess of $25,000,000 annually. During this period an impetus was given to the use of gold and silver as money by the government itself, which refused to recharter the second United States Bank (1832), to accept state bank notes in payment for public land (1836), and to use state banks as public depositories (1846).

Government paper money. — When the Civil War broke out, the circulating medium of the country comprised gold coins, fractional silver coins, copper coins, and state bank notes. Soon the state banks, as we shall see in the next chapter, were compelled to suspend specie payments — that is, they were no longer able to redeem their notes in gold or silver. At the same time the government itself also suspended specie payments. The result was a serious derangement of the monetary system. Congress then set about to remedy the situation. The secretary of the treasury was authorized (February, 1862) to issue $150,000,000 in United States notes (greenbacks). Four months later Congress authorized a second issue of the same amount. Subsequent issues brought the total amount up to $450,000,000

The government had no reserve of gold and silver with which to redeem these notes. Hence we call them irredeemable or inconvertible paper money.

National bank notes. — The year following the issuance of the first greenbacks Congress passed the National Bank Act (1863), which provided for the establishment of banks with federal charters. These banks were required to invest in government bonds, which they could use as security for national bank notes. Two years later the government gave to the national banks a monopoly of bank-note issue by imposing a prohibitive tax on state bank notes. In reality the government's credit served as the basis of national bank notes as well as of greenbacks, for neither were redeemable at the time in specie. During the war and for a dozen years after its close, gold was kept out of circulation by the operation of Gresham's law. The only money the people in general saw during this period was greenbacks and bank notes. Gold was bought and sold just as was wheat or corn. Any one desiring gold for export could always find it for sale at the New York Stock Exchange in what was known as the "gold room." There, also, the importers of gold could find buyers. The heavy issues of greenbacks and bank notes caused prices to rise, since, as we have seen in the discussion of the quantity theory of money, the value of the dollar declined. Another objection to both greenbacks and bank notes was that they were inelastic. The government could not regulate the amounts of either or both to meet the seasonal demands for money. In this respect they were little better, if any, than gold or silver coins.

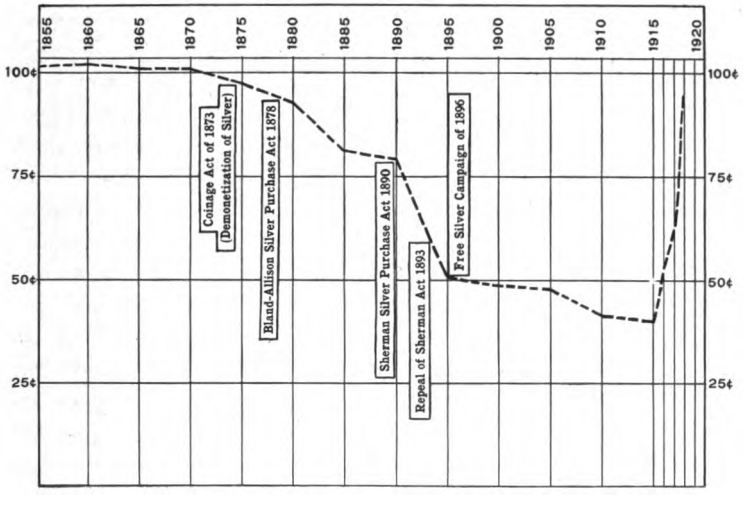
Resumption of specie payments. — Soon after the close of the war there arose an agitation to retire the greenbacks from circulation, and to return to a "hard money" basis. Many people objected. Finally the issue was compromised, with a

moderate reduction of the amount in circulation. The next logical step was to devise some plan for redeeming them on demand, when presented at the treasury. After considerable debate and discussion both in and out of Congress, a law was enacted (1875) which provided that beginning with January 1, 1879, the government would pay specie for greenbacks. In anticipation of the demand that might be made on him, the secretary of the treasury began to accumulate a gold reserve, which, by the end of 1878, amounted to more than a hundred million dollars. As January 1, 1879, drew near, the premium on gold declined until it disappeared. Contrary to expectations the people did not rush to the treasury to exchange their greenbacks for gold. The mere fact that the gold was there sufficed.

The silver question. — Two years prior to the passage of the resumption act, the government, in revising its coinage laws, omitted any mention of the standard silver dollar. In other words, the law *demonetized* silver. This legislation is usually referred to as the " crime of '73." At that time the market value of the 371.25 grains of fine silver necessary to coin a dollar was about $1.003 in gold. Hence no one was willing to carry silver bullion to the mint, for by so doing he would be compelled to exchange $1.003 for $1.00. It happened, however, that just about this time a great many rich silver mines were opened in the western part of the United States. Consequently, the value of silver fell until its market value was less than the *old* mint value — it fell to a point where it required *more* than 16 ounces of silver to buy one ounce of gold. Then the silver miners and their friends demanded that the government go back to a bimetallic basis. This a majority in Congress was unwilling to do. The matter was finally compromised in 1878 with the enactment of the Bland-Allison Law, which provided that the secretary of the treasury should purchase each month from two to four

million dollars' worth of silver, paying silver certificates for it. Silver production continued to increase. In 1890 another law, known as the Sherman Act, was passed. It required the secretary of the treasury to purchase four and one-half million *ounces* monthly, and to issue in payment treasury notes redeemable in gold. This new strain was too much for the gold reserve,

MARKET VALUE OF THE SILVER DOLLAR IN TERMS OF GOLD: 1865–1918.



for holders of silver bullion after accepting the treasury notes were privileged to present them forthwith for redemption.

The government was now at a point where it had to meet the silver question squarely and without flinching. In 1893, at the instigation of President Cleveland, Congress repealed the Sherman Act. This was the signal for the friends of bimetallism to make silver more of a political issue than ever before. Three years later the Democrats, led by William J. Bryan, made

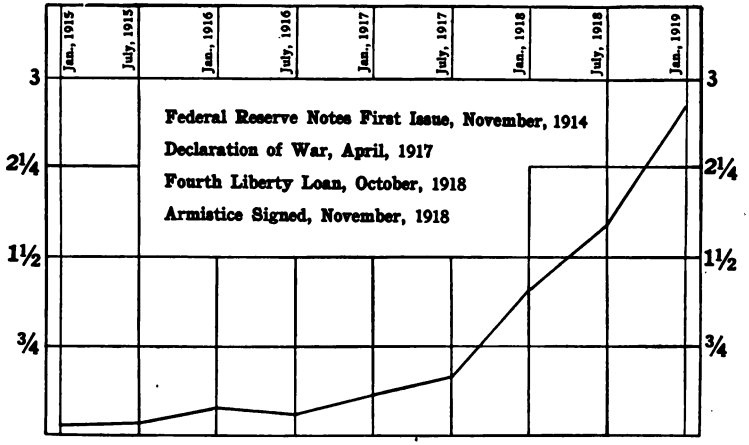
free silver their paramount issue. They pledged themselves, if returned to power, to *remonetize* silver, making it equal to gold at a ratio of 16 to 1. The Republicans declared for a single gold standard. Each party was divided over the issue. The "Gold Democrats" nominated a ticket of their own, while many western Republicans supported Mr. Bryan. The Republicans carried the day, their candidate, William McKinley of Ohio, being elected president. Four years later (1900) the so-called gold-standard act was passed, which provided definitely that the monetary standard of the United States should be the gold dollar of 25.8 grains, nine-tenths fine.

The experiences of the United States in its monetary legislation has been paralleled in every other modern nation. Every one of them has experienced the same difficulties, particularly in trying to maintain a bimetallic standard. England was the first to adopt the single gold standard (1816). Other European nations held back. Finally one by one they had to abandon their attempts to keep gold and silver at a fixed ratio, until now every country of any great importance is on a gold basis.

Federal Reserve Bank notes. — The final settlement of the silver question went far to stabilize our monetary system, but it did not add elasticity to our money. Finally, under the stress of a panic (1907), the large banks of the country issued clearing-house certificates on their own credit backed by the *commercial* paper which they had in their vaults. It was at once seen that this pointed to the solution of the vexed problem of elasticity. Accordingly, Congress authorized a close study to be made of the monetary systems of Europe and America. The result was the Federal Reserve Bank Law of 1913, which provided that regional banks, twelve in number, can issue federal reserve notes to member banks in exchange for promissory notes given to them by their customers, and for other securities. The result is an elasticity in our currency. Now when a bank needs

money to meet an extraordinary demand it can get it quickly from its regional bank. Further discussion of this system, however, must be deferred to the next chapter.

AMOUNT OF FEDERAL RESERVE NOTES IN CIRCULATION
(In Billions of Dollars).



Monetary stock of the United States. — As a result of the various monetary laws we have, exclusive of one-cent and five-cent pieces, ten different kinds of money, all based on the standard gold dollar.

Gold Coins.	Treasury Notes.
Gold Certificates.	United States Notes (greenbacks).
Silver Dollars.	Federal Reserve Notes.
Silver Certificates.	Federal Reserve Bank Notes.
Fractional Silver Coins.	National Bank Notes.

Gold certificates, as we have already seen, merely represent gold coin and may be exchanged for it at the treasury. The government is prepared also to exchange gold directly for silver dollars and fractional silver coins, and indirectly for

silver certificates. The various notes too can be exchanged either directly or indirectly for gold. Thus we see that the holder of any form of American money can get gold for it, if he proceeds in the right manner. Because of this significant fact, Gresham's law is inoperative; that is, there is no good and no poor money.

EXERCISES AND PROBLEMS

A

1. Distinguish between the mint ratio and the market ratio.
2. Under what circumstances is gold undervalued?
3. Why is a system of bimetallism difficult to maintain?
4. What is meant by the expression "elasticity of the currency"?
5. Why was the mint ratio changed in 1834?
6. Which metal circulated between 1792 and 1834? after 1834?
7. What was the "crime of '73"? Who called it a "crime"? Why?
8. Why were silver dollars not being coined in 1872?
9. Who began the agitation to remonetize silver? Why?
10. Point out the essential differences between the Bland-Allison Act and the Sherman Silver Purchase Act.
11. Just how does the Federal Reserve Bank Law give elasticity to the currency?
12. Name the various kinds of money in circulation in the United States.
13. Why do all of them pass at their face value?

B

1. Enumerate the various kinds of metals used in making United States coins.
   a. Why are different metals used?
   b. Which of these metals does the government coin freely?
   c. How does it get the other metals for coinage?
   d. Just exactly what does the expression "monometallism" mean?
2. What procedure is necessary to exchange each of the various kinds of money for gold?

3. Learn from some banker or newspaper the *present* market ratio of silver to gold.
   a. What changes have occurred in this ratio during the past few years?
   b. How did these changes affect the profits of the government in supplying fractional coins?
   c. What would be the effect if the government should now return to bimetallism with a ratio of 16 to 1?

C

1. During the free-silver campaign of 1896 many believed that a change of the mint ratio to equal the market ratio, which was then about 32 to 1, would be desirable.
   a. What was the basis of this belief?
   b. Would the adoption of the proposed change have solved the problems arising from bimetallism? Explain.
2. The story is told of a congressman who, when he heard a colleague state that the flow of gold from the United States was due to the action of Gresham's law, suggested that the law be repealed. Comment.
3. The operation of Gresham's law is closely associated with everyday business affairs.
   a. Of two dimes which is usually spent first, Canadian or United States?
   b. Of two five-dollar gold pieces, one new and the other worn, which would be melted down for the purpose of making a ring?
   c. Would new or worn gold coins be shipped to England in payment for goods?
   d. Give definite reasons for each of the three answers.
4. How, if at all, would the value of money *tend* to be affected by:
   a. The opening of new gold mines?
   b. An increase in the production of goods?
   c. An increase in population?
   d. An increase in the rapidity of the circulation of money?
   e. A greater practice of thrift?
   f. An increase in the volume of banking business?
   g. A change in the weight of the gold dollar?
   h. Increased efficiency in manufacturing?

SUPPLEMENTARY READING

BULLOCK, *Introduction to the Study of Economics*, 3d ed., pages 294–314.
ELY, *Outlines of Economics*, 3d ed., pages 248–269.
FETTER, *Economics*, Vol. II, pages 56–60.
FISHER, *Elementary Principles of Economics*, pages 223–232.
SEAGER, *Principles of Economics*, pages 322–340.
SELIGMAN, *Principles of Economics*, 5th ed., pages 493–509.
TAUSSIG, *Principles of Economics*, 2d ed., Vol. I, pages 265–289.

CHAPTER XVII

BANKING AND ITS HISTORY

51. Development of the Principle of Banking

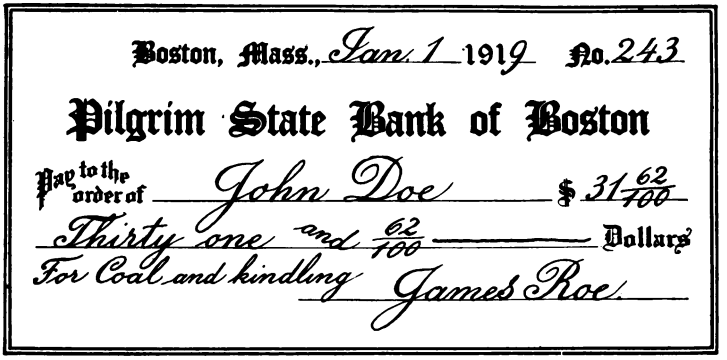
The medieval money-lenders. — Even in the Middle Ages, when industry was backward and most of the exchanges were carried on by barter, there were accumulations of capital in the form of gold and silver. Kings levied taxes and maintained treasuries; and borrowed great sums with which to carry on war, to make crusades, or to provide dowries for their children. Merchants and traders, too, often needed more ready money than they themselves possessed. Consequently, there grew up a class of men, confined largely for religious reasons to the Jews and the Lombards, who, seeing the advantages of making loans, kept their wealth liquid — that is, in the form of gold and silver. Obviously, they were compelled to take measures for protecting themselves against thieves. Soon, we may believe, their neighbors who had surplus funds of their own began to leave their money with these lenders for safe-keeping.

Discovery of the balance. — In the course of time the money-lenders (bankers) made an important discovery. They found that their neighbors (depositors), possessing a variety of "money habits," left a portion of their combined deposits in safe-keeping all of the time; that is, there was a *balance*, varying in amount from day to day, which the banker might use as if it were his own. With this knowledge in hand the banker employed a portion of the balance in his own business or, as was

more often the case, loaned it out to those who had need for money and who could give proper security. Here, it is believed, is the origin of modern banking.

In conducting his business in this manner the banker ran the risk of being unable to meet unexpected demands by his depositors. To forestall such a calamity he had to be on his guard at two points. First, he made loans only for short periods of time and on good security. To use a modern banking term, he kept his funds liquid. Second, he kept a portion of the

BANK CHECK.


Boston, Mass., Jan. 1 1919 No. 243

Pilgrim State Bank of Boston

Pay to the order of John Doe $ 31 62/100

Thirty one and 62/100 Dollars

For Coal and kindling James Roe

balance as a reserve, the size of which depended on his experience as a banker and on the margin of risk which he cared to assume. Later, bankers developed a plan of issuing their own promises to pay (bank notes) to borrowers, undertaking to redeem them on demand. Here again they discovered that some of these notes would always be in circulation. Consequently, they kept on hand only enough gold or silver to redeem the notes as they were presented. Naturally the next step which the banker took was to grant business men the right to check on him, each securing the amount of his credit by giving the banker

security in the form of a promissory note. From this discussion it may be seen that the banking business is built on confidence, and that without it there would be neither balances nor note issues.

The two chief functions of a bank, then, are (1) to receive deposits in the form of money or credit and in turn to lend money on credit, and (2) to issue notes. In this country no bank, *strictly speaking*, possesses the second function. Its business, therefore, is confined chiefly to the first function, though it may and does perform many minor ones.

52. Different Kinds of Banks

Commercial banks. — The most common bank of all is the commercial bank, which may be a national bank, a state bank, or a private bank. It gets its name from the fact that it confines its business largely to business men, receiving their deposits and cashing their checks as they come in. Commercial bank loans are almost invariably for short periods of time, usually thirty, sixty, or ninety days. Hence its funds are liquid. Contrary to the generally accepted notion among some classes of people, a commercial bank is anxious for its customers to borrow its funds for carrying on their business. Its profits depend almost entirely on its volume of loans, and its prosperity is intimately bound up with the prosperity of its customers. For these reasons the typical American banker encourages legitimate business expansion, and treats his borrowers with the greatest liberality consistent with safety. He is in fact more of a public official than most people think, for his business must be conducted with due regard for the well-being of society as well as for private gain.

Savings banks. — A savings bank differs materially from a commercial bank. First of all, a true savings bank is a mutual affair conducted primarily for the benefit of its depositors, though in some sections of the country stock savings banks may

be found. In states where there are no savings banks, that function is performed by the various commercial banks. Savings banks usually receive deposits of one dollar and upward on which they pay interest, do not pay out money on checks drawn against deposits, and may require a formal notice of several days before deposits can be withdrawn. Unlike commercial banks, savings banks usually contract loans for a year or more. This they are able to do for two reasons. First, they seldom have extraordinary demands made on them by depositors; and second, their privilege to compel depositors to serve formal notice of withdrawal gives the opportunity to raise the required cash from the sale of mortgages, bonds, or other securities. Savings banks, by receiving small amounts and paying interest, encourage thrift; their aggregate deposits, exceeding five billion dollars, comprise an important source from which industry can draw capital.

Trust companies and investment banks. — Many of the states charter trust companies, which perform in general the functions of commercial banking with some additional functions, such as executing trusts, and guaranteeing titles to land. Some of our largest banks are trust companies. A fourth type of bank, the investment bank, is usually a private institution, which concerns itself primarily in promoting the affairs of large industrial organizations. Such a bank is that of J. P. Morgan and Co. of New York. This bank has had a hand in organizing some of the largest industrial concerns in the country, notably the steel trust. It also takes an active interest in international banking, maintaining branch banks in the more important foreign financial centers.

The Federal Reserve Banking Law, however, authorizes national banks to engage in foreign banking, and some of them, notably the National City Bank of New York, are rapidly developing in this respect.

53. A Bank Statement

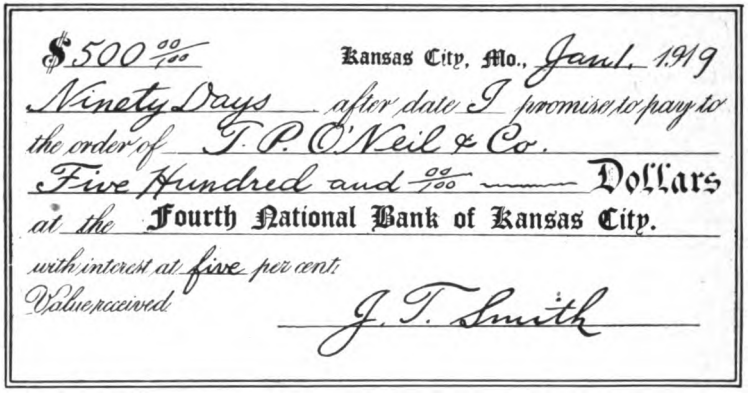
Form of a bank statement. — Banks from time to time are called on for financial statements. Such a statement indicates clearly the condition of the bank making it. On one side are arranged the bank's resources; on the other its liabilities. *The totals must always be the same;* that is, at all times a bank's resources exactly equal its liabilities. Since a bank *as such* is an inanimate and impersonal being it cannot own property or have debts in excess of its resources. This point usually proves to be a stumbling block for students, which, however, can be removed with a little care. A great many items enter into a bank statement, but for our purpose we need only choose a few of the most important ones.

Resources		*Liabilities*	
Loans and discounts .	$600,000	Capital	$100,000
Stocks and bonds . .	30,000	Surplus	40,000
Real estate	20,000	Undivided profits . .	10,000
Cash on hand . . .	30,000	Deposits	550,000
Due *from* other banks .	45,000	Due *to* other banks . .	25,000
	$725,000		$725,000

The statement explained. — Obviously the largest and most significant item among the resources of a commercial bank is *loans and discounts.* The difference between a loan and a discount is not important for our purpose in this connection. In one case the borrower receives the full amount of his promissory note, paying interest on his loan at its maturity; in the other, he has his note discounted, which means that he pays interest in advance, having it deducted from the amount shown on the face of his note. He may even offer for discount the notes of his debtors. This last transaction is known as *rediscounting.* A bank for one reason or another is likely, at any time, to possess *stocks and bonds,* though the smaller commercial

banks prefer to confine their investments to loans and discounts. *Real estate* may include, not only the banking house and its site, but also other real estate items, such as a farm or a city lot. The meaning of *cash on hand* is obvious. Every commercial bank, in order to meet the daily demands of its depositors, must keep on hand a supply of money the amount of which is regulated by sound business practice as well as by law.

PROMISSORY NOTE.


$500 00/100
Kansas City, Mo., Jan. 1919
Ninety Days after date I promise to pay to
the order of T. P. O'Neil & Co.
Five Hundred and 00/100 Dollars
at the Fourth National Bank of Kansas City.
with interest at five per cent.
Value received
J. T. Smith

The last item among resources, which for all practical purposes, is a cash item, includes all money owed by other banks. Usually it may be had on demand.

More difficult to understand are the items on the liability side of the statement. At first thought *capital* is likely to appear as a resource instead of a liability. It will be an aid to clearness if we remember that our statement represents the affairs of a bank and *not* the affairs of a banker. Since the bank owes its owners the amount of its capital stock, clearly, then, capital is a liability. *Surplus* and *undivided profits* are liabilities for exactly the same reason. The one is earnings set aside by

the directors to strengthen the capital; the other, earnings which may eventually be either paid to stockholders in the form of dividends or placed in the surplus fund. *Deposits* possess two important aspects. First, a deposit may represent an actual deposit of money in a bank, which the depositor may withdraw on demand. Most people believe that a deposit may be made in no other way. In holding the belief, however, they are mistaken. Bank customers deposit not only money, but also the proceeds of their own promissory notes. A clothier, for example, fearing that he will not have enough money to meet the payments of his spring bills, may arrange with his bank to credit his account with the amount necessary to meet them as they come due, securing the bank with a promissory note. Thus, obviously, a deposit may be made without the use of money. Among bankers such a deposit is known as a *created* deposit; and the checks drawn against it, as well as all other checks, are known as *deposit currency*. The last liability, *due to other banks*, shows the amount our bank owes to other banks.

54. Banking in the United States

Periods of banking history. — Some attention has already been given to the banking history of the United States in so far as it relates to note issue — issuing of paper money. We may now properly examine with some detail the part these institutions played in the industrial development of the country. As a mere matter of convenience, the banking history of the United States may be divided into four periods: (1) the United States banks (1791–1836); (2) state banking (1836–1863); (3) national and state banking (1863–1913), (4) Federal Reserve banking (1913–19—).

The United States banks. — When the national government was organized in 1789 there were but four banks in the whole

country. Alexander Hamilton, secretary of the treasury, and others recognized the need for a banking institution to assist the government in handling the public debt and in transmitting government funds from one section to another. Accordingly, in 1791 Congress and the President (Washington) chartered the first United States Bank, giving it, as far as the national government was able, a monopoly of banking for a period of twenty years. The capital stock was fixed at $10,000,000, of which the government was to own one-fifth. At the end of twenty years, when Congress refused to renew its charter, the bank went out of existence.

During the next five years the banking business of the country was carried on by state banks — that is, banks operating under state authority. By 1816, however, it had become apparent that another United States Bank was necessary to provide a uniform and sound currency and to assist the government in handling the public debt created by the Second War with England (War of 1812). Accordingly, Congress and the President (Madison) chartered the second United States Bank. The life of the new institution was twenty years; and its capital stock was $35,000,000, one-fifth of which was to be owned by the government. Besides issuing notes, the second United States Bank served as a depository for public and private funds, bought and sold domestic and foreign exchange, and made loans to business men. As yet the practice of using bank checks was confined to a relatively few. The bank, after getting a bad start, became prosperous and fulfilled the expectations of its supporters and friends. Unfortunately, it was drawn into politics about 1830. In 1832, Congress passed a bill rechartering the bank, which President Jackson vetoed. The next year the government ceased to use the bank as a depository for public funds. At the expiration of its charter the second United States Bank became a state bank; and the second

experiment of the United States in creating a large central bank was at an end.

State banking. — It must not be thought from what has been said that either of the two United States banks had enjoyed a monopoly. Numerous state banks competed with them, and opposed them at every point. This opposition, in fact, accounts in large measure for their downfall. President Jackson's veto in 1832 caused many other state banks to be organized. During the next thirty years the banking business was characterized by over-expansion and uncertainty. Many banks issued notes with little regard for their redemption, and undertook financial enterprises out of all proportion to their resources. During this period, however, there was developed the idea of free banking. Hitherto it had been the practice for state legislatures to grant *special* banking charters, thus opening the door to favoritism and even graft. A free banking law, on the contrary, permitted the establishment of a bank whenever a group of men who desired to do so could comply with a general banking law. No doubt the result was an increase in the number of banks in the country. Yet bankers, as never before, felt the necessity of conducting their business on a high plane, since they were no longer protected by the difficulties which competitors would have in getting charters. Such was the banking situation when the Civil War opened.

National and state banking. — The National Bank Law of 1863 did not abolish the state banks. It merely set up another system of banking alongside them. Since that time the two systems have grown and prospered; the chief difference between them being, as we have seen, that national banks may issue notes secured by government bonds. The notion generally prevails that national banks are sounder and stronger than their state competitors. This, however, is the case only where, capital and business integrity being equal, state laws are more

lax than federal laws. Fortunately, the states have become more strict in their requirements, until now many state banks are as rigidly supervised as are national banks. It is true that the largest commercial banks in the country operate under federal charters, yet some of the oldest and soundest banking institutions in our largest cities are state banks.

No account of banking since the Civil War would be complete without a notice of commercial private banking. In some of the states, banks, so far as the law is concerned, are as easily established as grocery stores or restaurants. In those states any man can become a banker by announcing that fact. To be sure, if he expects to do any business, he must secure a money safe and a set of books, and above and beyond all else he must possess the confidence of his neighbors and business associates. Such a bank often serves as good a purpose in a rural community as would a national or state bank. But in the cities, where even next-door neighbors are unacquainted, the private commercial bank is usually undesirable. This statement is particularly true of unregulated private banks operated in foreign sections. There the people, being strangers to our methods of carrying on the banking business, look on a bank as *a bank* whatever may be the character of its organization. They do not understand that national banks are carefully supervised by the federal government; and state banks, by the state. Since private banks usually have no such supervision, customers doing business with them are ordinarily compelled to carry a heavier risk than would be necessary in dealing with a national or state bank.

Federal Reserve banking system. — Profiting by an experience of more than a half century, the federal government in 1913 provided for uniting the banking strength of the country without robbing the banking business of its competitive characteristics — that is, provision was made for centralizing bank-

ing without establishing a central bank. The bank law of that year — the Federal Reserve Bank Law — created a bank board to sit at Washington which should have general charge of the *twelve* regional reserve banks, one bank being situated in each of the twelve districts into which the United States is divided. It provided also a board for each of the regional banks, and *required every national bank* in the country to become a member bank of its regional bank. Furthermore, it permitted *state banks* to become members, provided they carried on their business according to certain specified requirements laid down in the Reserve Law itself.

We have seen already how this new law has favorably affected the elasticity of the currency. It is an improvement over preceding banking laws in other ways. First, it tends to keep the money of the country from collecting in the New York banks, as was formerly the case, by requiring each of the regional banks to maintain large reserves of gold. Second, it provides that member banks may, by complying with certain requirements, borrow from their respective regional banks. Third, it facilitates the collection of checks drawn on one bank and cashed by another, by providing that regional banks shall be clearing houses. Finally, but not the least important by any means, it reduces the reserves which national banks were formerly compelled to carry for the protection of depositors. From whatever angle we may regard the Federal Reserve Law and its operation, we must conclude that it is by far the best banking legislation the United States has yet enacted.

EXERCISES AND PROBLEMS

A

1. Who were the Lombards?
2. Why did not the Christians ordinarily loan money?
3. Why may a banker expect to have a balance in his hands?
4. What is the difference between bank deposits and bank notes?
5. What are the essential differences between a commercial bank and a savings bank?
6. Why does a bank desire to loan its money?
7. What is the difference between a commercial bank and a trust company?
8. What are the functions of an investment bank?
9. What is a "bank statement"?
10. What is the difference between a loan and a discount?
11. Why is a bank's capital a liability?
12. Would the banker consider his investment a liability? Explain.
13. Define "bank deposit."
14. How does deposit currency differ from other kinds of currency?
15. How did the two United States banks differ from state banks?
16. Describe state banking between 1832 and 1863.
17. How did the National Bank Act affect banking in the United States?
18. In what respects did the Federal Reserve Banking Law improve banking?
19. Just how, if at all, was this system instrumental in selling Liberty Loan bonds?
20. Locate the regional banks.

B

1. Make a list of the banks in your community.
   a. Which of these are:
      i. Commercial banks?
      ii. Savings banks?
      iii. National banks?
      iv. State banks?
      v. Private banks?

b. Which has the largest capital? the smallest capital?
c. Which are members of the Federal Reserve Regional Bank?
d. Which own bank buildings? which rent?

2. Get a bank statement from some banker or from a newspaper.
a. Which kind of a bank is it (national, state, etc.)?
b. Inquire of some banker about any items you don't understand.
c. Divide the "cash on hand" by the "total deposits."
i. What does the result show?
ii. Do you consider this a safe margin? Why?
d. Can you judge the age of the bank by its statement? Explain.

3. Suppose you were one of ten persons to make equal deposits of money ($1000) in a bank, and that there are no other depositors.
a. Will the banker be likely to loan any of this $10,000? Why?
b. Is it correct to say that you have $1000 in this bank. Why?
c. Would the other nine persons be justified in making the same statement?
d. Have the ten of you $10,000 in this bank?
e. State exactly what each of the ten has.
i. Is it money in the bank? or
ii. Is it the right to demand money of the bank?

4. Examine a bank check.
a. How many names appear on the check?
b. Notice that it is payable on demand.
c. How many times and in what ways does the amount named in the check appear?
d. What is the difference between a bank check payable to *bearer* and one payable to *order?*
e. Would a check be a legal claim if it were written on a sheet of paper twelve inches square? on the margin of a newspaper? on a cuff?

C

1. Turn to any bank statement such as the one shown in this chapter, and determine how it would appear after each of the following transactions has been completed:
a. A deposit of $10,000 in money.
b. A 60-day note for $2000 is discounted at 6% and one-half of the proceeds is left on deposit.
c. A check for $1000 is cashed.

d. $3000 of the undivided profits are credited to stockholders.
e. A note of $5000 is paid in cash.
f. Bonds having a face value of $1000 are sold for $1050.

2. Explain why the following are *liabilities:*
   a. Deposits.
   b. Capital.
   c. Surplus.
   d. Undivided profits.

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CHAPTER XVIII

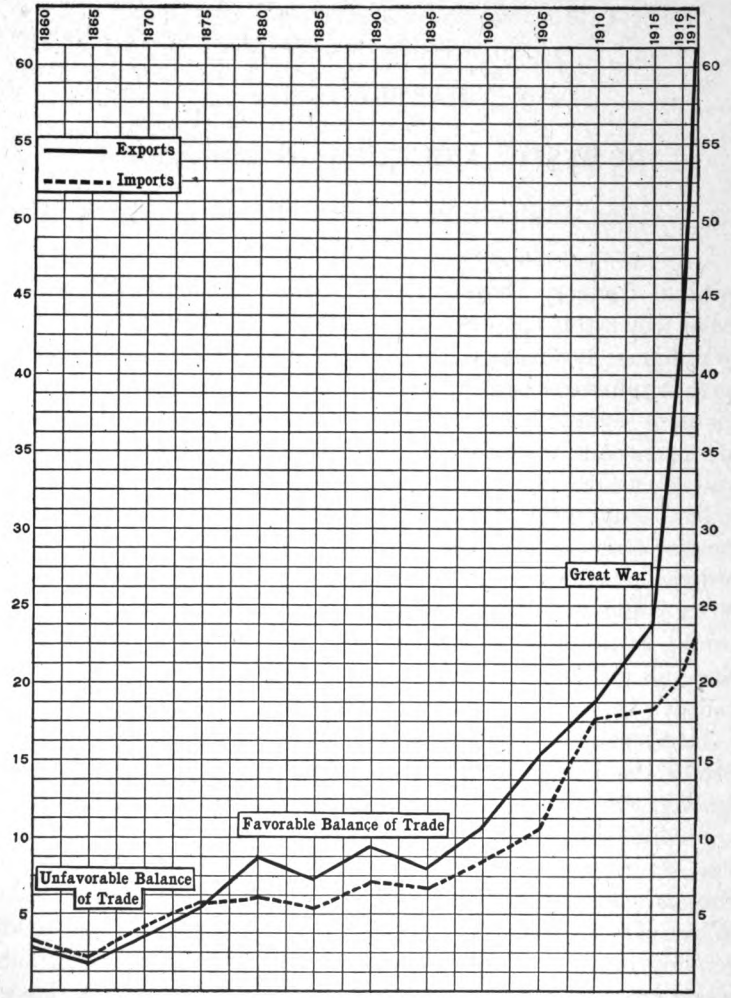
DOMESTIC AND FOREIGN COMMERCE

55. Nature and Volume of the Trade of the United States

Local trade. — Despite the elaborate territorial division of labor which this country enjoys, there still remains, in addition to retailing, a considerable volume of local trade. Most farmers have surpluses of eggs which they exchange for groceries, while many of them follow the practice of making a few extra pounds of butter each week for the local trade. Very often they buy and sell grain, hay, and foodstuffs among themselves, and even make barter exchanges. Likewise people in the towns and smaller cities have business relations differing somewhat from ordinary retailing. They exchange labor and even commodities. If we could include retailing under the head of local trade, it would, of its very nature, be the most important of all trade, since all goods except those exchanged directly are finally retailed.

Inter-regional trade. — In a large country like the United States the value and importance of the trade and commerce among the various sections are very great. Each section specializes in a few products, thus creating surpluses which find their way into every other section. The best evidence of this movement is the enormous freight traffic of our railroads. Wherever we go we see trainload after trainload of goods moving in all directions: food eastward, manufactured goods westward, wheat southward, cotton northward. A hasty

FOREIGN TRADE OF THE UNITED STATES
(In Hundreds of Millions of Dollars).



examination of the food and furnishings even of a modest home will show the significance of our inter-regional trade. Four everyday articles of food — sugar, salt, flour, and fruit — may represent four widely separated regions of the country. Yet because they are so common we are likely to underestimate the complexity of an industrial organization that places them on our breakfast table every morning, and to overlook the methods by which every producer is paid for his product.

Foreign trade. — Foreign trade is essentially no different from domestic trade. It rests on differences in climate, soil, capabilities of workers, and standards of living — that is, on territorial division of labor. Much of the domestic trade of our country resembles foreign trade in Europe, for the area east of the Mississippi River is approximately as large as all western Europe. Thus trade between New York and Florida is much like the trade between England and Spain. Mere distance, then, is not an important characteristic of foreign trade. As we shall see a little later, the chief difference between domestic and foreign trade is that the latter is always more or less hindered by national boundary lines, and by differences in languages, in customs, and in money units.

Our chief interest at this point is not in the trade itself, but rather in the methods of settling accounts among individuals, among sections, and among nations. The getting of goods from the producer to the consumer is a matter of production; the mechanism employed to make payments by the consumer to the producer is one of exchange.

56. Paying Trade Debts

Payments in money. — Obviously the simplest method to be employed in paying trade debts is for the debtor to discharge his obligation with money. If, as is often the case, the debtor should hold obligations against his creditor, he can discharge

his debt by paying the *balance* in money. It is a common practice in many rural sections for a farmer to buy his supplies on credit, selling his surplus products at harvest time to the merchant from whom he had purchased supplies. The two accounts are compared at regular intervals and the balance paid in money.

Payments in bank checks. — A more common practice, in most urban communities at least, is for debtors to discharge their obligations with bank checks. In that case the local bank, supposing for simplicity there is but one, becomes a clearing house for the settlement of local accounts. As the checks come in, the bank's bookkeeper merely credits the amounts of the checks to the accounts of those who present them and charges the same amounts to the accounts of those who drew them. It often happens that during the same day the maker of a check will deposit, for credit, checks of other persons which have been paid to him by his debtors. We might extend this illustration until it should become extremely complex. Yet two facts essential to a proper understanding of paying trade debts would remain unaltered. (1) Many obligations are discharged in modern industrial society without the direct payment of money. (2) Ultimate trade balances must always be paid in money.

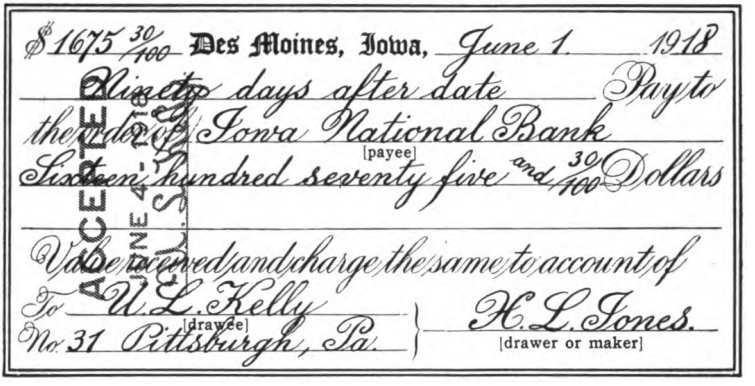
Open accounts and trade acceptances. — Inter-regional trade debts are usually handled in a somewhat different manner. Sellers of goods (goods, wares, merchandise, or agricultural products, including live stock), such as manufacturers and jobbers, may have their accounts paid in one of three ways. They may, as has been the general practice in the United States since the Civil War, simply sell to their customers on open account, depending on each customer to discharge his obligation at the expiration of some specified period, as thirty, sixty, or ninety days. Under such circumstances the only

evidences of indebtedness in the possession of the seller are the entries on his books, the correctness of which, if dispute should arise, it may be difficult to prove. The Federal Reserve banking system, however, provides for trade acceptances, which differ from open accounts. In addition to charging the buyer with the amount of his bill, the seller sends him a trade acceptance bearing certain specified promises previously agreed on, which the buyer formally *accepts* by signing it. The acceptance now possesses all the characteristics of a promissory note, which the holder (seller) may discount at his bank or at the Federal Reserve Bank. Trade acceptances are recognized by business men as being superior to open accounts. They relieve sellers from the necessity of carrying undue risk, increase the borrowing power of creditors, make commercial accounts more liquid, and compel buyers to meet their obligations at maturity.

Domestic bills of exchange. — Some sellers resort to a third method to collect from their debtors — a domestic bill of exchange. Let us suppose that a corn-buyer in Iowa has an order for a carload of corn from a cattle-feeder in Pennsylvania. As soon as he has loaded the car he gets from the railroad company a bill of lading which specifies among other things the amount of corn in the car, the name of the consignor (shipper) and the name of the consignee. He then draws a draft (domestic bill of exchange) on the consignee in which he orders him to pay at sight or at the end of some stipulated period, such as sixty days, the purchase price of the corn. Now the shipper is ready to visit his banker. He presents the draft and the bill of lading to the bank, which credits his account with the amount named in the draft. There are now three parties known in the transaction, the drawer (shipper of the corn), the drawee (buyer of the corn), and the payee (banker). The Iowa bank now sends the draft with attached bill of lading to some bank

in the neighborhood of the drawee. This bank presents the draft to the drawee, who either pays the amount named in it, if it is a sight draft, or if it is a time draft, he accepts it by

DOMESTIC BILL OF EXCHANGE.


$1675 30/100 Des Moines, Iowa, June 1 1918
Ninety days after date Pay to
the order of Iowa National Bank
[payee]
Sixteen hundred seventy five and 30/100 Dollars
ACCEPTED JUNE 4, 1918
Value received and charge the same to account of
To W. L. Kelly
[drawee]
No. 31 Pittsburgh, Pa.
H. L. Jones.
[drawer or maker]

writing across its face the word *accepted*. In any case the railroad bill of lading is turned over to him, for without it he cannot get possession of his carload of corn.

It is conceivable that a Pennsylvania manufacturer, a neighbor of the buyer of the corn, should sell several machines to a hardware merchant in the Iowa town where the shipper of the corn lives, and that he too should draw a draft on the merchant for the amount of his bill. If the two amounts were exactly the same and the same two banks handled both transactions, the two debts would be canceled without shipping money in either direction. If the amounts were not the same the difference between them would have to be settled in some other manner.

These various movements can be easily seen by examining the illustration (Fig. 8, page 247). Provided the two amounts of money involved were the same, the Iowa bank merely pays to

the corn-shipper what it collects from the hardware merchant, while the Pennsylvania bank pays to the manufacturer what it collects from the buyer of corn. In both cases the banks charge, in addition to a nominal fee, interest for the use of their money.

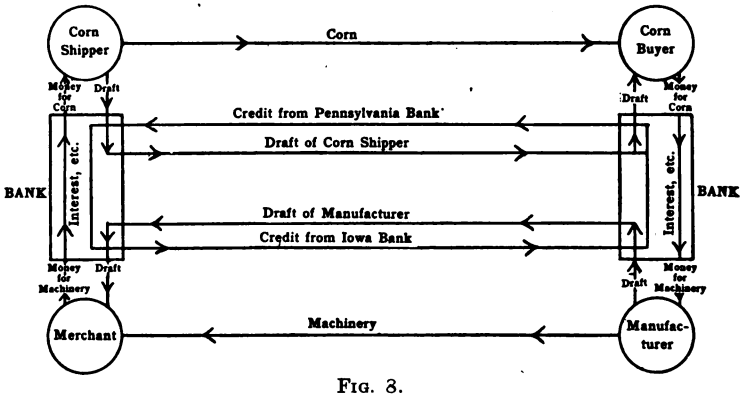


FIG. 8.

Foreign bills of exchange. — Generally speaking, foreign bills of exchange resemble domestic bills of exchange. Foreign bills, however, have two features which domestic bills do not have. First, there is the necessity of converting one standard of money into terms of another standard — that is, a bill drawn in dollars payable in London, for example, must have its amount changed to pounds sterling. Second, the length of time required and the expense involved in shipping gold from one country to another are usually greater than would be the case within a country.

57. THE BALANCE OF TRADE

Par of exchange and the gold points.— To simplify matters let us confine our attention in this discussion to trade between the United States and England. Let us also assume that all

sales are made with the agreement that debts are to be paid in London in sterling exchange.

It is first necessary to determine the *par of exchange* between these two countries. This, however, is a simple matter. It is done by dividing the weight of the fine gold in a dollar into the weight of the fine gold contained in an English pound. The result of the division is 4.866. Translated into terms of dollars the par of exchange is $4.866.

A second preliminary notion is the gold points, called by some authorities the gold exporting points. Under normal conditions the expense involved — interest, insurance, and freight charges — in shipping $4.866 in gold from the United States to England is about *two cents*. Consequently, we say that the upper gold limit is $4.886 and the lower limit, $4.846. This two-cent margin above and below par is much less than it was a century ago; and we may expect it to decline still more in the future with a decline in the risks involved in transportation, with quicker transportation, and with a reduction in the normal interest rate.

Fluctuations in the rate of exchange. — We are now prepared to examine the causes for fluctuations in the rates of exchange. Let us suppose that New York importers desire to buy a million dollars worth of sterling exchange with which to discharge their debts in England. Let us suppose also that exporters have sold to English merchants nine hundred thousand dollars worth of goods payable in London. Let us suppose further that there are no banks. The importers will seek for men who have debts owing to them in London, while the exporters will be on the lookout for men who are under obligation to pay debts in London. The former desire to buy credit, the latter to sell credit. Obviously, the importers could ship money to England with which to pay their debts, and the exporters could have the money owing to them in London shipped to

New York. In either case there is an expense of two cents per sterling pound — that is, the highest price importers will pay for the right to draw money in London is $4.886; the lowest price which exporters will accept for the right is $4.846. If we follow out our assumption we can conclude that the exporters sold all their rights to draw money in London at or near the upper gold point, while the balance owed by the importers, one hundred thousand dollars, was shipped.

Banks serve to facilitate matters. An exporter, like our Iowa corn-shipper, sells his foreign bill of exchange to his bank,

FOREIGN BILL OF EXCHANGE.

FIRST

No. 37

£1000 X New York, December 1918

Ninety days after Sight of this **FIRST** of Exchange (**Second Unpaid**) pay to the order of

State National Bank, New York,

One Thousand Pounds Sterling

Value received and charge the same to account of

To (2000 bu. wheat S.S. America)

LIVERPOOL IMPORTING COMPANY
Liverpool, England

A. B. Smith.

which sends it to its correspondent bank in London. The London bank presents it to the payer, and when the bill is paid, places the amount received to the credit of the New York bank from which it had received the bill. An importer, let us say, goes to the same New York bank and desires to buy sterling exchange. The bank, having credits in its correspondent bank in London, can accommodate him. What will it charge per

sterling pound? If it has relatively large balances in London, it is likely to charge the importer between $4.846 and $4.866. If its balances are relatively small, the price is likely to be between $4.866 and $4.886. The bank cannot afford to lose more than two cents on each pound sterling, for it could ship the gold from London to New York at that expense. Nor, for the same reason, would the importer pay more than $4.886. From the foregoing we see that the rate of exchange depends on the state of foreign trade. An excess of imports tends to cause the rates of that country to be above par; while an excess of exports tends to force the rates below par.

Other factors in the balance of trade. — Hitherto we have noticed only the importation and exportation of *goods* between the United States and England. We must now give attention to other factors that enter into determining the balance of trade. First, there is a steady stream of credit obligations, such as stocks and bonds, flowing between the two countries. An English investor, let us say, orders a New York broker to buy for him a number of Illinois Central railroad bonds. This transaction has the same *immediate* effect on the balance of trade as the same amount of exports from the United States to England would have had. Later, however, the effect on the balance of trade arising from *paying interest* on these bonds is the same as imports from England to the United States would have produced. This important fact is the basis of a trade movement which many people fail to understand. Before the Great War the annual value of England's imports exceeded that of her exports by several hundred million dollars — that is, England had an unfavorable balance of trade. This balance she paid, in part, with the interest on the investments Englishmen had made in American industry. Three other less important transactions act in a similar manner: the money English immigrants residing in this country remit to their folk

in England, the money American travelers spend in England, and the freight earned by English vessels carrying American goods, affect the balance of trade exactly like the payment of interest on English investments in this country. Hence a creditor people, such as were the English before the Great War, might easily go on forever with an unfavorable balance of trade. Conversely, a debtor people might also continue indefinitely to export more than they import, using the balance to pay travelers' cheques, immigrants' drafts, freights, and interest charges. The mere fact, therefore, that a country's trade for any period of time is highly favorable does not indicate, as many people believe, that that country is thereby increasing its gold supply by having the balance paid in that metal. Instead of gold it is more likely to be receiving canceled drafts, bond coupons, and freight receipts.

We may now extend our illustration in which it was assumed that imports into the United States were valued at one million dollars and exports at nine hundred thousand dollars. Let us assume that during the same period English capitalists invested $100,000 in American bonds, that $5,000 were paid to English investors in the form of interest, that American travelers spent $20,000 in England, that English immigrants remitted $15,000 to England, and that English merchantmen earned $25,000 in freights. Our accounts for the United States would then be:

Cr.		*Dr.*	
Exports	$900,000	Imports	$1,000,000
Investments	100,000	Interest	5,000
Balance due		Travelers' cheques	20,000
English exporters	65,000	Immigrants' remittances	15,000
		Freight	25,000
	$1,065,000		$1,065,000

Flow of gold and its effects on prices. — We may now turn to a consideration of the last step in settling the balance due

English exporters, which, according to the assumption above, is $65,000. Export bills of exchange are no longer to be had, since the total amount, $900,000, has already been absorbed by the importers, who originally owed $1,000,000 in England. A portion of the $100,000 investment, let us assume, has gone to pay interest and freight, and to cash travelers' cheques and immigrants' remittances. There remain then but $35,000 to be applied to pay on the *balance* of the debts of American importers, which, we have seen, was $100,000 ($1,000,000 — $900,000). Consequently, *gold* to the amount of $65,000 must be exported from the United States to England. This is the *ultimate* means employed in every case to pay balances of trade.

The movement of gold to pay balances is self-regulating. Let us suppose that year after year it is necessary to ship gold to England to pay balances of trade. Gradually the supply of gold in that country would increase, while in the United States it would decline. According to the quantity theory of money, which is, *that as the supply of gold increases its unit value decreases*, prices in England would tend to rise while in the United States they would tend to fall. England would then be a poorer buying market and a better selling market than would be the United States. Consequently, the flow of gold from the United States to England would decrease while the flow in the opposite direction would increase, thus lessening, if not entirely destroying, the balance in favor of England. Because of this self-regulation, statesmen and bankers no longer, as they once did, look with great disfavor on a flow of gold from the country. They know that if it is needed here it will flow back in response to a lowering of prices.

EXERCISES AND PROBLEMS

A

1. Why do individuals exchange goods?
2. What is the essential difference between domestic trade and foreign trade?
3. What is the basis of foreign trade?
4. What is a "bill of exchange"?
5. What is a "bill of lading"?
6. Define "par of exchange."
7. How is it determined between any two countries?
8. What persons deal in foreign exchange?
9. What are "gold points"?
10. How are these points determined?
11. What cause the rates of exchange to fluctuate?
12. How are these rates restricted by the gold points?
13. Explain "favorable balance of trade"; "unfavorable balance of trade."
14. Is an unfavorable balance of trade necessarily disadvantageous to a country? Why, or why not?
15. How may a country maintain indefinitely an unfavorable balance of trade?
16. How does a country that has no gold mines get its supply of gold coins?

B

1. Examine the articles in your own home or in the schoolroom and try to determine which of them were produced:
   - *a.* In your own community.
   - *b.* In your own state.
   - *c.* In the United States.
   - *d.* In other American countries.
2. Secure a domestic bill of exchange from some bank.
   - *a.* Fill it out as if you had sold a carload of corn to James White, payable in sixty days.
   - *b.* What would be the next step in the transaction?
   - *c.* How will the bill look after its acceptance by White?
   - *d.* Who is likely to hold the bill until it matures?
   - *e.* How does the *accepted* bill differ from a promissory note?

3. The French monetary unit is the gold franc, containing 4.48 grains of *fine* gold.

a. How many francs can be coined out of a United States gold dollar?

b. This number represents the "French par of exchange."

c. Estimate the gold points.

4. Make a list of transactions coming under your own observation, which would affect the rates of exchange between your community and New York City; the rate of foreign exchange between New York and South America.

C

1. How could each of the following affect the rate of exchange between the United States and England:

a. Failure of the wheat crop in the United States?

b. The building of an American merchant marine?

c. The purchase of London city bonds by New York bankers?

d. The return of British immigrants to the mother country?

e. The decline of gold production in the United States? in South Africa?

2. How would the gold points on sterling exchange be affected by:

a. Change in the interest rates from 5 to 4 per cent?

b. Improvement in shipbuilding?

c. Establishing aëroplane traffic between the United States and England?

3. Suppose the imports from England exceed our exports to that country. How is this trade condition likely to affect:

a. The rate of sterling exchange in New York?

b. Prices in the United States? in England?

c. Probable future trade movements?

d. Profits of exporters? of importers?

4. It has been proposed that the nations of the world should adopt a uniform currency. How would such a proposal, if carried out, affect:

a. Par of exchange?

b. Rates of exchange?

c. Gold points?

d. International trade?

e. Domestic trade?

f. Gold mining?

g. Issue of paper money?

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CHAPTER XIX

THE TARIFF IN THE UNITED STATES

58. Historical Sketch

Advances to a protective rate. — The first forty years' experience of the United States in tariff legislation resulted in a movement from moderately low rates to rates too high to be endured by certain sections of the country. The first tariff act, which was passed in 1789, was intended by Congress primarily as a revenue measure, though it did give, as its preamble states, a degree of protection to a few industries. During the next twenty-five years, tariff legislation received little attention at the hands of the lawmakers: in 1804 an increase of five per cent was made for raising funds for the Barbary War, and in 1812, in order to raise revenue for carrying on war, the rates were doubled.

The first real demand for a protective tariff came at the close of the War of 1812, when American manufacturers found the home trade which they had built up during the war seriously threatened by English exporters who were flooding the American markets with English-made goods. Congress and President Madison, realizing the justice of the demand, agreed to a new tariff law which should give special protection to woolen and cotton goods by imposing various rates, some as high as twenty-five per cent, on all such goods imported into the United States. During the next few years, however, the opinion grew rapidly in the South that the rates of 1816 were harmful to the interests of that section. Portions of New England, too, favored lower

duties. This was the feeling when Congress took up the tariff question in 1824. Representatives from the middle states, from Kentucky, and from portions of New England supported protection. The opposition leaders came from the South and from New England. After protracted debate the friends of protection, led by Henry Clay, secured a continuation of the rates on woolen and cotton cloth; also increases in rates on other goods, notably iron.

The next seven years saw the Union almost broken asunder over the question of protection. The manufacturers, dissatisfied with the legislation of 1824, set up an agitation for higher tariff rates. By this time the South was disgusted with what its leading men said was the "greediness of the North." But the question would not be quiet. Accordingly in 1828 Congress once again took the matter under advisement. The debate that followed showed the South arrayed against the North, with the West divided. John C. Calhoun of South Carolina and other Southern members of Congress left nothing undone to convince their colleagues that an increase in tariff rates would be not only an injustice to the South, but also a means of destroying the bonds that held the Union together. But their efforts were in vain. Congress enacted the "Tariff of Abominations" law, which bore the highest rates of any tariff prior to the Civil War; and which, strange to say, satisfied nobody, not even protected manufacturers, since they now found it necessary to pay tariff duties on many of the raw materials which they were compelled to use in their business. The South was in a ferment over the tariff question. South Carolina took advanced ground by threatening to oppose within her boundaries the enforcement of the tariff law. Fearful of the outcome of such an action, Congress in 1832 modified somewhat the law of 1828, but not enough to satisfy South Carolina.

Decline of the tariff rate. — The situation now grew worse instead of better. South Carolina declared the tariff law of 1832 to be null in so far as its operation in that state was concerned. President Jackson, who was determined to enforce the law as long as it remained on the statute books, secured from Congress authority to compel the obedience of the nullifying state. Both sides prepared for the struggle, which seemed inevitable. Just then Clay, whom everybody regarded as the "father" of the protective principle, came forward with a compromise measure in which he sacrificed temporarily for the sake of peace the essential features of protection. The result was the Compromise Tariff of 1833, which provided that all the rates in the Act of 1832 above 20 per cent should be gradually reduced to that level, the final reduction to be made on July 1, 1842.

Consequently, there was no general tariff legislation during the next eight years. In 1841, however, the Whigs came into power pledged to raise the tariff rates as soon as the compromise had run its course. Accordingly, with the guidance of Clay, a Whig Congress passed a protectionist measure, which President Tyler forthwith vetoed. Later (1842) he agreed to a bill similar in character, which is known in the history of the United States as the Whig Tariff of 1842. Three years later the Democrats, on return to power, set about to revise the tariff rates downward. Careful investigations of business conditions were made by Robert J. Walker, secretary of the treasury. With the information secured by Secretary Walker as a basis, Congress enacted the Walker Tariff Act of 1846. This act was free trade in character; it arranged the articles taxed under schedules designated as A, B, C, and so on; and it carried a large free list — that is, imports not taxed. With slight modifications this act continued in force until 1861, when it was superseded by the Morrill Act, which bore higher rates made necessary by a treasury deficit.

The war tariffs. — The heavy expenses of the Civil War prompted Congress in 1862 and again in 1864 to raise tariff rates to a point higher than they had ever been before. Compared with the Morrill Tariff, the war tariffs increased, among others, rates on pig iron and iron rods fifty per cent, on silks sixty per cent, on raw wool one hundred per cent, and on certain woolen goods one hundred per cent. Soon after the close of the war, the opponents of protection urged on Congress the necessity of making material reductions in the war-tariff rates. Their success was slight, for a majority of the people believed in the merits of protection. Finally in 1887 President Cleveland devoted his entire annual message to the necessity of lowering tariff duties. This was the signal for a congressional battle. The Republican members stood solidly for protection; the Democratic members, for a tariff for revenue only. The debate that followed (in 1888) was a battle of giants. No direct legislation resulted, though it served, as nothing else could have done, to bring the subject of protection into the political foreground.

A period of high tariff rates. — Two years later (1890) the Republicans, being in power both in Congress and in the White House, enacted the McKinley Tariff Law, which placed the rates on many imports even higher than the war tariffs had done. Apparently the people were not prepared for such a radical measure. The election of 1890 gave the Democrats control of the lower house of Congress, Mr. McKinley even failing of election in a district supposed to be protectionist. Two years later (1892) the Democrats captured the presidency as well as Congress. They then set about to enact a tariff law along the lines they had been advocating for a half century. The result was the Wilson Tariff Act, which in many respects resembled the old "Abominations" act of 1828. It pleased nobody, for it was merely a bundle of inconsistencies, made so

by the desire of many members of Congress to secure protection for the goods produced in their respective districts and free trade for the goods consumed there. Even President Cleveland refused to sign the bill, permitting it to become a law without his signature.

Circumstances combined to make the Wilson Tariff unpopular. The people believed that it was largely responsible for the Panic of 1893, and two years later they elected Mr. McKinley and a Republican Congress pledged to revise the tariff rates *upward*. Accordingly in 1897 the Dingley Tariff Law was enacted with even higher rates than those in the McKinley Act. The prosperity that followed, a majority of the people attributed for a time to the Dingley Act. By 1908, however, the rank and file of the protectionists had misgivings as to the influence of such high rates on industry. They began to suspect that the tariff was largely responsible for the high prices, which were coming to be burdensome. Sensing this feeling, the Republican platform of that year declared for a revision of tariff rates. Being successful they set about to carry out their promises. The result was the Payne-Aldrich Tariff Law of 1909, which, while it reduced many rates, did not prove satisfactory to those who had a sincere desire to see the tariff materially modified.

A return to lower rates. — The Payne-Aldrich Law served to widen a split which was already making itself felt in the Republican party. The more progressive leaders of the party felt that it was not living up to its best traditions as a friend of the masses. Gradually the breach widened, until those who desired to work reform within the party came to be known as *insurgents*. By the spring of 1912 the feeling had become bitter. President Taft was supported for reëlection by the conservatives of the party, while the more liberal elements favored ex-President Roosevelt. Both men were finally nominated, one by the Republicans, the other by the Progressives. Divi-

sion meant defeat. The Democrats elected Woodrow Wilson, their candidate for president, and likewise a Democratic Congress.

Once again in control of the government, the Democrats began to lay plans to revise the tariff. Congress spent months in examining witnesses, and in discussing the advantages and disadvantages of each rate. Finally in 1914 the Underwood-Simmons Tariff Law was sent to the president for his signature. This act, as might be expected, lowered many rates, and enlarged the free list. To offset any decrease in revenue that might arise from these changes, an income tax, conformable to a recently ratified amendment to the Constitution, was imposed.

Basis of tariff legislation. — Practically every one of our tariff laws has been the result of compromise. Protection cannot escape being sectional, or even local, in any country; and in a government like ours, where each lawmaker represents the interests of a single district, localism is an exceedingly strong force. Each lawmaker very naturally feels the necessity of conserving the interests of his own constituents. Accordingly, he is strongly tempted to vote for an entire tariff law which favors his district, even though he be decidedly opposed to nine-tenths of its provisions. The legislative history of any important tariff law bears out this statement. It has frequently occurred that a bill passing one House has been subjected to hundreds of amendments in the other.

It is but fair to say that Congress has made some attempts to get at all the facts in the case of protection. In 1882 that body provided for a Tariff Commission and granted it power to examine witnesses for and against the protective policy. The people placed little confidence in the good intentions of the Commission, since, unfortunately, its chairman happened to be interested in the wool industry. Again, in 1909 a second commission, called a Tariff Board, was authorized. This Board

survived but a few years. In 1914 Congress provided for a third commission, which, on account of the high personnel of its membership, is likely to have the moral support of the people. It must be kept in mind, however, since Congress cannot delegate its legislative powers, that the best any tariff board or commission can hope to do is to arrive at some definite conclusion fortified by unanswerable facts that will appeal to the good sense of Congress and the people.

59. Basis of Free Trade

Advantages of territorial division of labor. — The chief argument for free trade — and some are bold enough to insist that it is the only one needed to prove the case — is based on the advantages arising from territorial division of labor. We have seen how industry naturally adapts itself to locality: cotton-growing to the Southern states, wheat-growing to the upper Mississippi Valley, and iron-smelting to Pennsylvania. We have seen also how, as a result of this adaptability, the world's supply of goods is greatly increased over what it would be if each locality or section were self-sufficing. With this fact established, the advocate of free trade raises the question: What possible benefit to the society of such a country as ours can come from setting up artificial barriers that prevent consumers from getting their goods where they can be most advantageously produced? They ask just how much better off industrially would New England be at the present time if every pound of cotton which has gone into that section had paid an import tax. The most enthusiastic supporter of protection realizes the advantages gained from interregional trade within the United States. He knows that one of the sources of wealth of Pennsylvania is the rich grainfields of Iowa and Illinois; and that a tariff wall that would compel each bushel of wheat or corn to pay an import tax would work a positive hardship on the consumers of

Pennsylvania without benefiting the producers of Iowa or Illinois. The free trader at this point extends his argument by insisting, for example, that the people of the United States, wheat farmers included, would profit in the long run if they could secure wheat from Argentina cheaper than they could produce it at home.

No buying without selling. — The free trade advocate next takes safe ground by declaring that there can be no buying without selling — that is, no importing without exporting. He points out that our purchases abroad in cheap markets must be paid for in goods of our own production; and that the cheaper they are the less of our goods it will be necessary to send abroad to exchange for them. Finally, by selecting an extreme illustration, he shows the absurdity of the protectionist doctrine of self-sufficiency. He asks if it would be profitable to grow bananas in Maine, corn in Rhode Island, cotton in New York, or sugar cane in Pennsylvania. Of course the answer is "No." He then completes the argument, as far as he is concerned, by asking why the natural adaptability of industry should be hindered at all.

60. Economic Arguments for Protection

The infant-industry argument. — The soundest argument for protection is known as the infant-industry argument, which means simply that a society is justified in burdening itself to protect new industries *temporarily* against the competition of similar foreign industries, already full-grown and strong. Alexander Hamilton clearly saw this need and urged on Congress in his Report on Manufactures (1791) the necessity of encouraging those struggling industries which gave promise of future development. The practical difficulty which the carrying out of this policy has met has been the disinclination on the part of the protected infant to see when he has really reached his manhood stage.

The home-market argument. — Second in point of time is the home-market argument, which Hamilton outlined in his Report on Manufactures, and which Henry Clay enlarged and extended during the tariff debate of 1824. The essence of this argument is that a very large country, like the United States, should artificially encourage one industry in order to provide a market for the products of another. Clay contended that the United States could amply afford to burden itself with the relatively high prices of New England manufactures, if by so doing a market was provided in New England for the grain of the Mississippi Valley and the cotton of the lower South.

The wages argument. — The most potent argument for protection at the present time is the wages argument, which assumes that protection causes higher wages than would otherwise be the case. Its exponents hold that protection accounts for American workers getting higher wages than foreign workers engaged in the same trade or industry. They usually fail, however, to explain by similar reasoning why wages are higher in free-trade England than in protected Germany. It must be remembered too that at no time under the highest tariff rates was more than one-tenth of the workers of the country engaged in protected industries.

61. Protection and Nationalism

The spirit of nationalism. — Protection is essentially nationalistic. Its ideal is a nation industrially strong and self-sufficient to a high degree. Any force that increases the spirit of nationalism increases also the desire for additional industrial strength. Illustrations from the history of our country are illuminating. Every foreign war, except the one with Mexico, has been the direct cause of an increase in tariff rates or of a maintenance of rates already high. The cause is not far to seek. War necessarily increases the dependence of a country on its own

industries. Besides, it knits the various sections into a closer union. Hence, there arises a general desire not only to maintain the increased self-sufficiency reached during the stress of war, but also to protect those industries which the war itself has brought into being.

Military self-sufficiency. — Many of the most ardent friends of protection agree that it has little economic justification, and that it imposes a heavy financial burden on any society which adopts its principles and practices. They insist, however, and with justice, that the financial cost of protection does not differ in principle from the cost of a battleship. Each in its own way, they say, plays an important role in defending the country from her enemies. The Great War brought the truth of this argument home to the whole world. The interruption of our trade with the Central Powers threatened for a time to cripple some of the important industries that depended on German products, such as chemicals and dyes. Fortunately, after expensive experiments and long delays, we succeeded in making good our loss in these lines. But it is doubtful if, in the long run, we gained by not having previously encouraged these same manufactures by protecting them against German competition. As one writer has put it: What does it profit a poorly clad and poorly equipped soldier to know that for generations his ancestors have gained financially by purchasing their woolen cloth and equipment from the present enemy simply because they could not make them so cheaply at home?

EXERCISES AND PROBLEMS

A

1. What is the difference between a protective tariff and a tariff for revenue only?
2. Why were the first tariffs not protective?
3. Why was the South generally opposed to protection?

4. Why was New England divided over the tariff about 1820?
5. Why was the tariff of 1828 called the "tariff of abominations"?
6. Why are *schedules* used in tariff acts?
7. Why were tariff rates not lowered at the close of the Civil War?
8. Account for the various changes in the tariff between 1890 and 1909.
9. Why is the tariff likely to be a local issue?
10. What benefits could possibly accrue to the people of Iowa by placing, if it were constitutional, a tariff duty on Pennsylvania iron? on Massachusetts cotton goods?
11. Why can there be no buying abroad without selling abroad?
12. What is the essence of the "infant industry" principle?
13. How has this principle been abused?
14. What is the relation of protection and nationalism?

B

1. Make a list of goods you know to be of foreign manufacture.
   a. Which foreign countries are represented in the list?
   b. What is the nature of the articles in the list?
      i. Are they heavy?
      ii. What raw materials have gone into their manufacture?
   c. Why have they been imported and not made in this country?
2. Call to mind the most successful physician in your community.
   a. Suppose that he is also a mechanical genius.
      i. Does he keep his own car in repair?
      ii. Does he repair his surgical instruments?
   b. Suppose that he is also the strongest man physically in the community.
      i. Does he make it a practice to mow his own lawn?
      ii. Does he help store the coal in his basement?
   c. Suppose that he is also the most expert typist and office worker in the community.
      i. Does he do his own typing?
      ii. Does he keep his own books and answer his telephone?
   d. Correct answers to these and similar questions which any one of us can raise, will aid in clearing our notions of protection.
3. Inquire among the business men of your community as to the attitude of each toward a protective tariff.

a. Which hold to views held by their fathers?
b. Which are interested in a business way in the tariff?
c. Which believe strongly in nationalism? in internationalism?
d. How many have changed their views on protection since they first began to give the question serious thought?
e. Learn why these views have been changed.
f. Would you say, after making this inquiry, that the average business man thinks seriously on protection and its effects?

4. Explain why your own community or congressional district is protectionist or free trade.

C

1. During the first half-century of our history many individuals and several sections of the country changed their opinions radically regarding the merits of protection.
a. Why did the South at first favor protection?
b. Account for Clay's zeal in supporting protection.
c. Why was New England divided over the question?
d. Would you expect any changes of opinion to have occurred in New York, Ohio, or Indiana? Explain.

2. At one time the friends of protection argued that the high wages of American workmen made high tariff rates necessary to protect the American manufactures that gave these workmen employment. Now the argument is that the tariff itself makes the wages of American workmen high.
a. Examine each argument.
b. Is either sound? Explain.
c. Are they inconsistent? Why, or why not?
d. What, in your opinion, is the relation of protection and wages?

3. Examine the statement that "the tariff is a local issue."
a. Which sections of the country invariably support or oppose protection?
b. Can you think of any inducement that might cause free-trade senators to vote for protection? Explain.
c. How would you expect your congressman to vote on protection? Why?
d. Which is likely to be the stronger force, his own judgment or the interests of his district?

4. "Every purchase of foreign-made goods diminishes the demand for American labor."

a. What is the basis of this statement?

b. What, in the long run, is used to pay for foreign-made goods?

c. Formulate your own opinion as to its correctness.

5. What lessons on protection did the Great War teach the United States.

SUPPLEMENTARY READING

BULLOCK, *Introduction to the Study of Economics*, 3d ed., pages 387–410.
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FISHER, *Elementary Principles of Economics*, pages 194, 195, 207, 208, 337, 453, 454.
JOHNSON, *Introduction to Economics*, pages 350–373.
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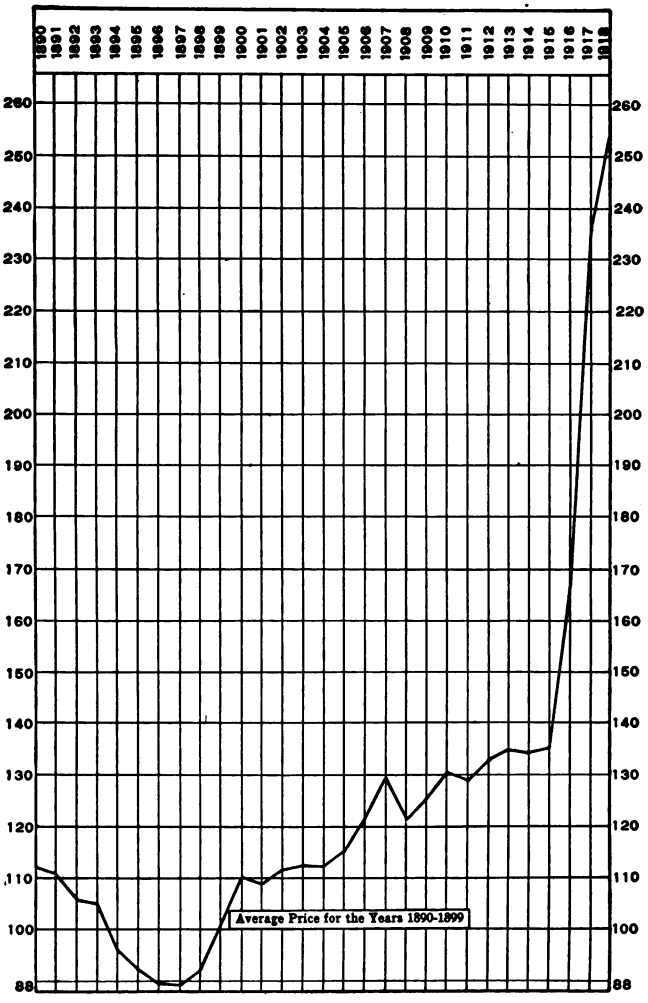
CHAPTER XX

FLUCTUATIONS OF THE PRICE LEVEL

62. Effects of Fluctuating Prices

Fluctuations in the value of money. — The general notion is that money, especially gold, possesses a constant value. Yet any one who has had experience in making purchases over a period of time, realizes that a gold dollar will, in general, buy less at one time than at another. His conclusion is likely to be, not that the value of the dollar has changed, but rather that prices of goods have changed. In general these two changes are but opposite aspects of the same economic phenomenon. A rise in prices means a fall in the value of money, while a fall in prices indicates that the purchasing power of the dollar has risen. If all exchanges were made by barter there could be no change in the general price level — that is, the value of all goods could not rise or fall. If some fell others would rise, while if some rose others would fall. To get a simple illustration, let us suppose that a bushel of wheat will exchange for two bushels of corn, or for ten pounds of meat or for twenty oranges; and, further, that there are no other goods under consideration. Let us suppose further that a short wheat crop causes the value of wheat to rise until a bushel will exchange for three bushels of corn, or fifteen pounds of meat, or thirty oranges. Truly the value of wheat has risen, but what of the value of each of the other goods in respect to wheat or to each other? Clearly corn has fallen in value if we compare it with wheat; it has *not* changed in value, if measured in terms of oranges. Thus, if corn

FLUCTUATIONS IN PRICE LEVEL: 1890–1918.



were the medium of exchange we would say that wheat has risen in price and that the price of meat and oranges has remained the same. If, on the other hand, wheat were the medium of exchange, the fact that a unit of wheat exchanges for more corn, meat, or oranges would indicate a general fall in price level. Since money is the medium by which all other values are measured, its value rises and falls inversely with the rise and fall of the price level.

Effects on individuals. — Appreciable variations in price level are soon noticed by individuals, in a variety of ways, especially by those whose incomes are constant. A rise in prices has exactly the same effect as a decrease in income, and conversely a fall of the price level is actually an increase of the income. There is, to be sure, in most cases a tendency for the income to follow price level; yet salaries and wages almost always lag behind a rise in prices, while they respond more quickly to a fall. Price fluctuations are largely responsible for social unrest. When one has adjusted his income to his expenditures, any change, especially an upward tendency in prices, is not welcome. The most striking effect is felt by those who depend entirely on funded incomes. Thus, a widow receiving a life insurance annuity of $600 a year is bound to feel the pinch of an increase in the price level. She finds it necessary to curtail portions of her accustomed expenditures. Her command over goods in 1918, for example, was scarcely more than half as great as it had been twenty years before. In reality, then, her income had shrunk from $600 to $300.

Effects on the government. — A rise in prices quickly affects governments — national, state, city. All of the states, for example, expend large sums annually on charitable institutions, the amount of which is usually determined at stated intervals. If after the size of an appropriation is fixed, the prices of foodstuffs, or fuel, or clothing rise, the appropriation is bound to

prove inadequate to meet the needs for which it was made. Salaries, too, must be adjusted to meet the increased cost of living. Even stationery, printing, and office supplies cost more than formerly. Here is a partial explanation for the rapid increase in taxation following the year of 1900. The effects of higher prices on government show themselves quickly under the stress of war. The national government borrows huge sums. Prices rise as a result of war demands. Usually, additional funds are necessary to cover unanticipated rises in prices. Thus the problems of war have added to them the problem of securing funds to cover inflated prices.

63. Measurement of Price Fluctuations

Payment of long-time debts. — In the preceding discussion we have confined our attention to short-time transactions in which the effects of price fluctuation may be difficult to see. Let us now turn, merely for illustrative purposes, to its effects on long-time transactions. Suppose one man loaned another in 1900 the sum of $1000 payable in eighteen years. When the loan was made, the $1000 possessed a certain purchasing power, which may be designated by $4x$. Gradually, as is well known, the general price level rose, until in 1918 it was about twice as high as it had been eighteen years previously. When the loan is repaid the lender finds that its purchasing power has been decreased by half, to $2x$. In other words, he cannot derive from it the same satisfaction which he could have derived when he loaned it. He finds that it requires more money to buy the same amounts of food, of clothing, and of other goods. The significance of this loss of purchasing power appears strikingly in the case of a savings-bank deposit, which bears a low rate of interest. Let us assume that such a deposit was made in 1905, remaining ten years and earning three per cent interest compounded annually. One hundred dollars deposited under these

circumstances equaled $134.39 in 1915. Yet the rise in prices during that period more than offset the interest earnings. In short, the depositor, as far as the gratification of desires was concerned, was in a poorer situation when he withdrew his deposit than he had been when he made it. Depreciation in the value of money (rise of the price level) works a similar hardship on debtors. Thus, a dollar which is repaid after a period of falling prices has a much greater command over commodities than it had at the time the loan was made.

Principle of index numbers. — For measuring these changes in general prices a convenient device known as *index numbers* is employed by the government and others. The prices for *any* year may be taken as a standard by which the prices of any other year may be measured. For purposes of illustration, we may take 1902 as the standard year and by it measure the price level of 1912, as follows:

1902		1912
$ 1.00 — 100%	— Wheat (bu.) . . .	$ 0.80 — 80%
15.00 — 100%	— Iron (ton)	18.00 — 120%
0.12 — 100%	— Cotton (lb.)	0.13 — 108%
7.00 — 100%	— Cattle (cwt.)	6.00 — 86%
0.30 — 100%	— Wool (lb.)	0.40 — 133%
6.00 — 100%	— Hogs (cwt.)	6.00 — 100%
6)600%		6)627%
100%		105%

Thus, by considering only the *six* commodities named, we find that the price level of 1912 is five per cent higher than it had been in 1902. It will be noticed, however, that during this period the price of hogs remained unchanged, and that the prices of wheat and cattle fell. If the consumption of an individual were confined to these three commodities, he would, during the ten years under consideration, have enjoyed a falling price. Yet the typical consumer, since he is likely to purchase a great many different commodities, would have found at the

latter date that the purchasing power of his money had actually declined, compared to its purchasing power in 1902.

Applications to industry. — The principle of index numbers is applied in a variety of ways to the adjustment of industrial problems arising from price fluctuations, though it is not yet generally accepted by business men as a practical solution. The government from time to time publishes the fluctuations in prices as shown by ndex numbers, and very often, as in the case of fixing wages, employs it to adjust unfair conditions. It has been seriously proposed by some that the national government undertake, by changing the size of the gold dollar, to keep prices at exactly the same level. So far the proposal has appeared to officials and business men as impracticable, though none denies the need of some plan whereby incomes might be protected against price fluctuation.

64. Price Level and Industry

Different phases of industry. — The accepted explanations of what economists call *cycles of business* are too involved for detailed discussion at this point in our progress. We can, however, notice with profit the three phases through which industry seems to move in its never-ending journey. For the sake of convenience we shall begin our examination at the point where prices start to rise, giving attention first to the period of prosperity; then to the period of malproduction, usually called overproduction; and finally to the period of depression, which brings us back to the starting point.

Period of prosperity. — Rising prices and industrial prosperity are intimately related. Just as soon as prices begin to rise producers begin to enjoy increased profits, which in turn stimulate them to increase the volume of their output. They buy more land, build additions to their plants, purchase newer and better equipment, and increase their laboring forces. They

reach out after new markets, either by increasing their sales force or by advertising more liberally. Prosperity is in the air. Every undertaking seems to succeed. Raw materials increase in value, permitting higher prices to be set on finished products even before they are ready for the markets. Jobbers and merchants reap additional profits which arise from the increases in value their goods have enjoyed while waiting to be sold. It is to be noticed that the enterpriser first of all feels the impulse coming from a rising price level. This impulse he transmits to others by competing sharply for raw materials, land, labor, and capital, which he must have in order to gain increased profits through an increase in production; also by increasing his own purchases for consumption.

This whole movement is extremely complicated, yet we may assume a simple case for purposes of illustration. Five manufacturers of a standard article enjoy, let us say, a monopoly of its production. Just as soon as the price level starts upward they begin to enjoy additional profits arising from the increased price which their products command. Each sees the desirability of increasing his own output. It is highly probable that up to this point their laborers have not enjoyed any of the income which the increased price produces; and it is also possible that the producers of the raw materials which our five manufacturers consume are selling at the old price. The competition of the five, however, will in time raise wages, and increase the prices of raw materials.

Malproduction and credit expansion. — The struggle for extra profits overreaches itself in due time. Producers overestimate the capacity of the market for consumption at a price that will return costs of production. Here is the key to the mooted question: Is overproduction possible? The answer may be Yes or No. In either case an explanation is necessary. Overproduction is possible, if, by overproduction, we mean that there

is a surplus of goods for which there is no demand at a price that will cover the expenses involved in producing them. It is not possible in the sense that there are more goods than society can consume, for the social capacity for consumption is never satisfied. What actually happens is that too many goods of a particular kind are thrown on the market — that is, there is *malproduction*.

At the same time there is almost sure to have been an over-expansion of credit. Producers of all sorts have been carried away by the hope of anticipated profits, resulting in the creation not only of more goods than society *demands*, but also in the creation of excessive money obligations. Such a situation usually results in a crisis. Manufacturers curtail their operations by lessening their purchases of raw materials, by discharging portions of their workmen, and by contracting their active capital. Producers of raw materials, laborers, and money-lenders must, as a result, curtail their expenditures for consumable goods. All is uncertainty. Business optimism has disappeared. The typical business man waits for others to take the lead. Prices are now on the decline.

Period of falling prices. — After the first few months of the crisis, business begins to readjust itself on a new basis. Conservatism becomes the watchword. Producers exercise great care in determining the markets. They give more attention to details, are less liberal in paying wages, and drive sharp bargains for raw materials. If prices continue to fall for a time, as is usually the case, readjustments are constantly necessary. Obviously, there is a limit below which prices cannot fall. Hence the time must come when the trend will turn upward. This is hastened by the natural optimism of business men, by the infusion of new blood among the enterprisers, and by improvements in the industrial arts. Here, then, we are back again at the point where we started.

Experiences of the United States with panics. — It may happen, as our own experience shows, that the panic comes at the close of a fall in the price level rather than at its beginning. In 1873 we experienced one of the worst panics in our history. Yet from that time on for almost twenty-five years prices continued to fall, culminating in the panic of 1893. For three years following this latter panic prices kept on downward. Then they started upward until by 1914 they had reached such a height as to cause grave concern. Many far-sighted men predicted a severe crisis. Just then the outbreak of the Great War created a heavy demand for all sorts of products. The supply of money increased. Manufacturers exerted themselves to reap war profits. Practically every one felt the prosperity that came from the war. The entry of the United States itself in the war, in April, 1917, gave a still greater impetus to production. The heavy demands of the government, coupled with the withdrawal of millions of men from industry, pushed prices still higher, which no doubt a return to normal conditions will lower.

EXERCISES AND PROBLEMS

A

1. Why cannot the value of all commodities, gold included, rise or fall at the same time?
2. What is the relation between the price level and the value of an ounce of gold?
3. How does a change in the price level affect individual incomes? public incomes?
4. What is the relation of changing price level to social unrest?
5. Why is it desirable to measure fluctuations in price level?
6. What is the principle underlying the use of index numbers?
7. How are index numbers applied to business affairs?
8. Just how does the shifting of the price level affect industry?
9. Why should a crisis usually be found associated with high prices?
10. What is meant by the expression "overproduction"?
11. What has been the experience of the United States in panics?

B

1. Call to mind some experiences of your own in which the price level has appeared to change.

2. Learn from inquiry how a rise of the price level has affected some stationary income such as a pension or an annuity.

   a. Does the person receiving the income realize that it has declined in purchasing power?

   b. If so, what is his (or her) explanation of the decline?

      i. Is it based on changes in value of commodities?

      ii. Is it based on changes in the purchasing power of money?

   c. Which of the two explanations appears to be the more correct?

   d. How, if at all, could the receiver of this stationary income protect himself (or herself) from a loss in its purchasing power?

   e. What is the likelihood that changes in the purchasing power of stationary incomes will discourage savings and investments?

3. Assume prices for eleven important commodities for two given years, say 1914 and 1919.

   a. Compare the price level for the two periods.

   b. How would the change in price level have affected an annuity of $800?

   c. How, if at all, would you expect this change to affect wages in general? wages of any particular group?

   d. How should wages be so adjusted as to place the wage-earner in 1919 on the same income level he had occupied in 1914?

   e. What change should be made in the weight of the gold dollar in order to give it the same purchasing power in 1919?

C

1. If, during a single night, the general price level should double, what would be the *immediate* effect and the *long-run* effect on the income of each of the following:

   a. Wheat-grower?

   b. Owner of a gold mine?

   c. Day laborer?

   d. Jewelry manufacturer?

   e. Civil War pensioner?

   f. High school student?

2. Since the fluctuations of the price level *tend* to create social unrest, why does not the government set the prices of all commodities and fix labor incomes?

3. Account for the fact that wages invariably react slowly to a rising price level.

4. Why does the government make little or no effort to prevent crises?

5. Discuss the practicability of changing the weight of the gold dollar to correspond with changes in general price level.

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BULLOCK, *Introduction to the Study of Economics*, 3d ed., pages 333–348.
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PART V

DISTRIBUTION OF THE SOCIAL INCOME

CHAPTER XXI

DISTRIBUTION OF WEALTH IN THE UNITED STATES

65. Differences in Wealth and Income

Meaning of distribution. — Distribution, as we have already seen, means the sharing of the products of industry among the factors of production — land, labor, and capital. The shares that go to these factors are respectively, rent, wages, and interest. Usually two other portions are set aside. One is the profits of the enterpriser; the other, the taxes of the government. Thus, in reality, we must account for five shares in distribution; and in doing so we must exercise supreme precaution, for no other phase of our economic life has called forth such bitter controversies or created so much social unrest.

Distribution and free land. — We may say, with reasonable assurance, that the problem of distribution is a modern one. At least its importance, so far as the United States is concerned, is now many times greater than it was a century or even a half century ago. The explanation is not difficult. It is, like a great many other explanations of American developments, intimately associated with the opportunity each man had to settle on practically free land. As long as it was not only possible, but also fairly easy for each one to acquire a farm for himself, he who was dissatisfied with his share in distribution had a fair opportunity to go on the land where he would control all of the shares. Hence, little was heard of the poorly paid laborer, the bloated capitalist, or the rich landlord; for all labored, almost all were capitalists in the sense that they owned

their tools, and all had a fair chance to get land. Laborers in those days felt little or no need of organizing to secure a larger share in the distribution of products. They saw very clearly in most cases the straight road that led from the employee to the employer class. Capitalists *as such* were few. Hence, the share in distribution that went to them was comparatively small. As the amount of free public land became less and less, the importance of distribution became greater and greater. The supply of free land not only declined, but also, what is more important, it receded westward, making itself unavailable to the workers and capitalists of the East. First the worker lost the opportunity to escape to the land, and next, owing to developments in production, he lost control of his tools. Then he began to lean heavily on capital for support; and then capital began to play an increasingly important part in production. Here we find for the first time in the history of the United States sharp lines separating the factors of production, and hence, the shares in distribution.

Present-day distribution. — Under more primitive conditions the typical, individual income, as we have just seen, was made up of several indistinct parts. For his labor he received wages; for his land, rent; for his capital, interest; and for his business skill, profits. He had, at the best, but a hazy notion of the size of each share. The same situation still holds in agriculture. No farmer can estimate even with any degree of accuracy just what portion of his yearly income ought to be attributed to wages, to rent, to interest, or to business ability; and no one else can do it for him; for the four factors, being embodied in one person, are inseparable. In most other productive lines no such difficulty is encountered. There, we can usually determine what portion of the product each factor gets, though the problem of how much each factor *ought* to get still remains unsolved. There, for example, the wages of the laborer approxi-

mates his total income. His returns in the form of rent or interest are likely to be comparatively small. Likewise, to a less degree, the income of the landowner (not farmer) is rent; of the capitalist, interest; and of the enterpriser, profits.

Here we have the cause for distribution tending to become a class problem. Each group, having lost an interest in the shares of the other groups, strives to increase its own share at their expense. The result is mutual misunderstanding. Labor complains of the greediness of capital, while capital in turn complains of labor's unwarranted demands. Neither appreciates the part the landowner plays, while all three resent having to pay tribute to the enterpriser, whose duty it is to bring them together for productive labor.

Distribution of income and wealth. — We may, with no regard to the source of the income of each class, also examine the distribution of incomes and wealth among classes. Yet it would not be far wrong to say that the lower income groups are made up almost entirely of laborers, while the higher income groups comprise, for the most part, landowners, capitalists, and enterprisers, and the so-called professional people. Professor King estimates incomes among American families as follows:

Annual Income	Percentage of Families Receiving Less than this Income	Annual Income	Percentage of Families Receiving Less than this Income
$200	.07	$1500	90.31
300	1.04	1800	93.67
400	7.17	2000	94.86
500	16.70	2400	96.18
700	38.92	3000	97.42
1000	69.43	3600	98.10
1200	81.69	4000	98.39

An examination of this estimate — for it can be nothing more than an estimate — reveals many significant facts. First, the

annual income of more than two-thirds of the families is less than $1000 each, while less than one-tenth of the families each enjoy an income of $1500 or more. Second, the number of families having yearly incomes of as much as $3000 is relatively small (2.58%). To be more specific, a small tradesman or a skilled mechanic with an annual income of near a thousand dollars, even though a portion of it be derived from savings or land, belongs to the upper minority. Also higher-paid railroad employees, such as train conductors and locomotive engineers, must be grouped among the highest one-twentieth.

Another carefully prepared estimate (made in 1918) throws light on the number of families *and individuals* in each income group. Estimating the total number of incomes at 27,000,000 and the aggregate income of all groups at $38,000,000,000, the following conclusions were reached:

Average Income	Number of Families	Per Cent of Total Income	Per Cent of No. of Incomes
$ 850 (or less)	7,275,000	12.3	26.9
1,000	3,500,000	9.4	12.9
1,250	2,250,000	7.4	8.3
1,500	1,600,000	6.3	5.9
2,000	385,000	2.0	1.4
3,000	167,000	1.3	0.6
4,500	72,000	0.8	0.3
7,500	26,500	0.5	0.1
12,500	45,000	1.5	0.2
75,000	1,787	0.4	0.1–
1,000,000	100	0.3	0.1–
2,500,000	34	0.2	0.1–
5,000,000 (and over)	10	0.3	0.1–

It is to be noticed in the above table that the number of annual incomes of $1000 or less (column 2) is relatively twice as great (column 4) as the share of the total income received by that group (column 3); also that as the average income rises it

enjoys an increasingly large proportion of the total income (compare columns 3 and 4).

Expenditure of family incomes. — Quite as important as the differences in the sizes of incomes is the manner in which families of various groups expend their respective incomes. Some years ago the United States Commission of Labor made the following estimate:

Object of Expenditure	Income Under $200	Income $300 and Under $400	Income $500 and Under $600	Income $700 and Under $800	Income $900 and Under $1000	Income $1200 and Over
	Per Cent	*Per Cent*	*Per Cent*	*Per Cent*	*Per Cent*	*Per Cent*
Food	49.64	45.59	43.84	38.89	34.34	28.63
Rent	15.48	14.98	15.15	15.60	14.96	12.59
Clothing	12.82	14.14	15.27	16.33	16.84	15.71
Fuel	7.07	6.04	5.63	4.42	4.00	2.57
Lighting	1.01	0.98	0.97	0.88	0.74	0.45
All other purposes	13.98	18.27	19.14	23.88	29.12	40.05

Many other investigations of incomes have been made and all seem to point to the same general conclusion:

1. As the income of a family increases the relative amount spent for food decreases.

2. Approximately the same relative amount is spent for rent irrespective of size of income.

3. Increase in income is accompanied by an increase in the amount spent for education, recreation, amusement, etc.

66. Some Social Problems Arising from Distribution

Class antagonism. — We can now see that the members of our modern industrial society may be grouped according to the shares of income — wages, rent, interest, and profit; also according to total income irrespective of its source. In either case there is a cause for class antagonism, particularly on the

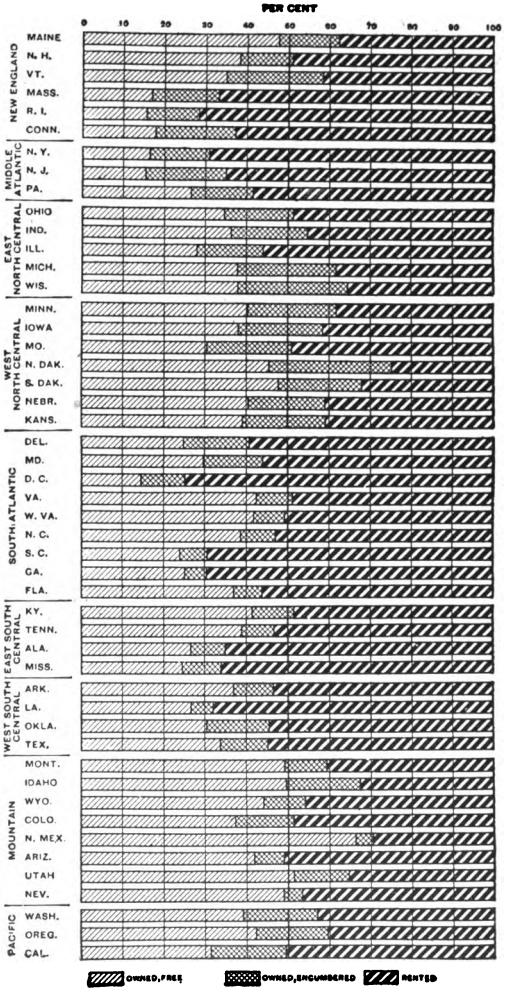
part of those whose incomes are relatively low. Any self-respecting head of a family with an income of less than eight hundred dollars — there are millions of them — is likely to regard such inequalities of income and wealth as appear in the preceding table as a rank social injustice; while those having still lower incomes are tempted to hate an industrial system that permits such differences. They naturally take the position that no one family deserves or needs an income equal to the total income of a fairly large city composed of laborers. The most stolid of them know perfectly well that the interests of industrial society are not furthered by permitting one man or one set of men to appropriate for their own use hundreds of millions of dollars' worth of wealth. By a simple calculation they see single Americans controlling more property than the entire total taxable property in a city like Des Moines or Indianapolis. They see the income of a small group of capitalists equal the total income of all the laborers of a city like Cleveland or Denver. What wonder, then, that there is social unrest and class antagonism!

Entirely different is the usual attitude taken by the members of the higher income groups toward their less fortunate brethren. They, on their part, are satisfied with existing conditions; and in this self-satisfaction lie the dangers that always mark class antagonism. Too often they explain misery and poverty by saying that it is the result of indolence, intemperance, or vice; failing to see, however, that intemperance, for example, is a result as well as a cause of poverty. Fortunately, serious-minded men and women are attacking the problem of inequality in a business-like manner. Instead of scattering alms among the poorly paid, as did the sultans of Arabian Nights fame, they are teaching men and women how to help themselves, not only by increasing their incomes, but also by spending them to better advantage. Few expect or

even desire to see property holdings or incomes made equal. Few object to the comforts and luxuries of the rich. Few dream of an industrial millennium in which no distinguishing marks shall separate one group from another. Many, however, are determined that the dirty tenement must go, that the submerged tenth must be made self-supporting, that free and universal education must become a reality, and that every one must have a fair chance to develop himself industrially. If this spirit of service and helpfulness ever pervades the upper income groups, which it must if American society and democracy are not to be endangered, we may expect, not necessarily a leveling of incomes, but certainly a more equitable distribution.

Industrial inefficiency. — Either extreme in the matter of income tends to make its possessors industrially inefficient. It is trite to say that a man whose income is insufficient to nourish his body properly is an inefficient worker. Since millions of men and even whole families have such an income, it follows that great numbers of workers in this country are inefficient. Employers contend that they cannot pay more wages until efficiency is increased; but efficiency cannot be increased without an increase in wages. Here clearly is the place for society to do what no employer feels justified in doing and what few inefficient workers can do for themselves. Already, as we have seen, individuals and private associations are working in this direction. But this is not the work of one or two or of a hundred. Society alone can reap the reward of a widespread elevation of industrial efficiency. Society, therefore, ought to bear the expense of elevating it. Again, too high an income also tends to industrial inefficiency. Nothing has yet been found that can take the place of the desire for comfort and moderate luxury as a stimulus to economic activities. A high salary, for example, is a fair indication of efficiency, but not, by any means, a *cause* of efficiency.

PROPORTION OF ALL HOMES OWNED FREE, OWNED ENCUMBERED, AND RENTED, BY STATES: 1910.



No account of the causes of industrial inefficiency would be complete without some notice of the effects of indolence, intemperance, and vice. It seems to be a law of human nature that all work is more or less irksome. Fortunately, a majority of people possess enough will power to overcome indolence. There are those, however, who prefer privation and even hunger to manual or mental labor. Their greatest need is ambition. The drinking of alcoholic liquors also destroys efficiency. Scientists are agreed that no one can be at his best with the least trace of alcohol in his system. Managers of

large industrial plants are unanimous in their testimony that the drinking habit among employees is the chief source of their inability to get a maximum production. Fortunately, this source of inefficiency, owing largely to the stand taken by employers, is rapidly disappearing. Vice, which likes to associate itself with alcohol, also destroys industrial efficiency. Gambling, loafing in billiard rooms, and sexual abuses unfit one for economic activity.

Midway between these sources of inefficiency and the inefficiency itself, is illness. First comes indolence, intemperance, or vice; next, bodily or mental illness, and then, industrial inefficiency. The indolent man is usually ill or easily made so when there is a prospect of work. Intemperance leads to all sorts of ills. So also does vice. There are those unfortunates, however, that must not be blamed for their physical or mental shortcomings. Some are born incapacitated for work, some are the victims of greed or accident, some are undernourished in spite of their best efforts and intentions. These deserve first consideration at the hands of society.

67. Proposed Solutions

Voluntary. — We have already noticed the attempts of individuals and associations to equalize distribution by carrying charity and education to those who need help. We may now examine briefly some ambitious attempts to secure for various classes, particularly for workers, a larger share of the social income by securing for them a portion of the shares that usually go to other factors of production.

Coöperation in retailing, particularly in foodstuffs, has had some success in this country, though to a much less extent than in England. The chief aim of coöperative enterprises is to eliminate the enterpriser, and thus to divide the profits which would ordinarily go to him among the members of the enterprise.

Even among the higher income groups, attempts are often made by individuals associated together to increase their incomes in the same way. Coöperative dairying, coöperative grain-buying, and mutual fire insurance organizations are examples.

Compulsory. — Society has through taxation already done something in the way of equalizing distribution. The poorest child in New York has as many privileges in the city parks as has the largest taxpayer. Nor are distinctions made in the matter of schools, of police protection, of fire protection, of sanitary regulations, or of garbage collection. Such public activities as these, which are supported by public taxation, relieve the lower income groups of a heavy burden, thereby securing for them indirectly a larger portion of the social income than they would otherwise get. Still another method of lessening inequalities in distribution by taxation is shown by the inheritance, excess-profit, and income taxes. In each case, those who have much are compelled by force of law to give, indirectly to be sure, to those who have little.

The socialists, about whom we shall have more to say farther on, propose that the state itself assume all the functions of the capitalist and the enterpriser, thereby securing for the workers the entire amount of interest and profits that now goes to these two classes. For that reason socialism is a distributive problem. It is significant to note in this connection that many of the enterprises recently undertaken by the government, such as the construction of irrigation dams and ditches, are, despite the opposition that has developed against anything socialistic, advocated by socialists.

EXERCISES AND PROBLEMS

A

1. Define "distribution."
2. Why are profits and taxes shares in distribution?
3. What is the intimate relation between free land and distribution?

4. What shares in distribution went to the pioneer farmer?
5. Why is it said that free land receded westward?
6. Just how did the laborer lose control of his tools?
7. What during the past century has caused the lines separating the shares in distribution to become more distinct?
8. Why is there such a great inequality in wealth?
9. Suggest some method for removing this inequality.
10. What is the relation between income and industrial efficiency?
11. Name and evaluate the causes of inefficiency.
12. Why is society interested in the efficiency of the individual?
13. Just how does taxation tend to equalize wealth and income?

B

1. List the names of the heads of families in your block.
   a. Estimate the income of each family.
   b. Are there any noticeable variations among these incomes?
   c. Which families belong to the higher income groups? the lower income groups?
   d. How does the average family income compare with the average family income of your community?
   e. How does your own family income compare with the average family income of your block?
2. Estimate roughly the incomes of the families represented in your class. With this estimate as a basis, what are your conclusions as to the diffusion of education among the masses?
3. Interview persons in different income groups.
   a. Do you find any spirit of class antagonism? Analyze.
   b. What reasons do you find advanced to explain inequalities?
   c. Inquire about solutions of the problem.
   d. Formulate your own conclusions in the matter.
4. From observation and inquiry determine as accurately as possible how business men regard the following:
   a. Drinking of intoxicating liquors.
   b. Irregular hours.
   c. Habits that destroy mental or physical strength.
   d. Expensive tastes.
   e. Idleness and loafing.
5. Suppose you were asked to devise a scheme for equalizing incomes through taxation.

a. What public enterprises would you create or enlarge?
b. How would you regard the extension of public education?
c. Would you favor supplying free bread or free meat? Why, or why not?
  i. How does *c* differ from *b*?
  ii. Which would meet the greater opposition?
d. Would you exempt all except the very rich from paying taxes? Why?

C

1. "Poverty is an individual matter. No man need be poor in a country like the United States, where industry constantly cries for laborers." Comment on the above statement.

2. Many well-to-do men argue that it is little or no concern of theirs if individuals refuse to be temperate and thrifty.
a. Is this a correct attitude?
b. Under what circumstances is society to blame for intemperance?
c. Would the well-to-do be profited financially by an increase in temperance or thrift? Explain.
d. Should "the strong bear the burdens of the weak"?

3. What is the relation of each of the following to attempts to distribute wealth and income more equally through taxation:
a. Free public education?
b. City parks?
c. City milk inspection?
d. Public highways?
e. Pure-food laws?
f. Free band concerts?
g. Public recreation grounds?

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CHAPTER XXII

RETURN TO LABOR (WAGES)

68. Noncompeting Groups of Workers

Existence of these groups. — Practically every one engaged in economic activities may be said to be a worker, and as such to receive wages in some form. Employees are not the only ones who earn wages. A portion of the income which goes to enterprisers of all sorts — farmers, merchants, independent mechanics, and professional men — is wages. These workers may be divided into rather distinct groups, and each group in turn divided into an indeterminate number of subgroups. At the top are captains of industry, manufacturers, merchants, professional men, clerks, and public officials. This group is distinguished from the other group by its relatively high income level. Among economists it bears various titles, such as "soft-handed," "kid-glove," and "white-collar." This group may be divided, according to income, into two subgroups: captains of industry and a few highly paid professional men comprise one; in the other subgroup are found the rank and file of professional men, clerks, and all others whose labor is not characterized by hard manual work. The second group, the "hard-handers," enjoys less income as a group, though in this respect, its higher paid members stand ahead of the lower members in the first group; that is, the two groups overlap in the matter of income. In this lower group may be distinguished three subgroups: (1) highly paid manual laborers, such as railroad engineers, expert machinists, and glass blowers; (2) the rank and file of skilled

laborers; (3) unskilled laborers. The first of these three subgroups comprises the aristocracy of the manual laborers. Its members enjoy a much higher income level than do millions of professional men, farmers, merchants, clerks, and public officials. In fact, those in subgroup number two, and even some in the third, rank higher in the matter of income than the poorest paid workers among the soft-handed group.

The question may properly be asked why workers do not promptly overcrowd the higher-paid positions, thereby tending to equalize the incomes of all, irrespective of the nature of their employment. An adequate answer involves many considerations. First, only those of superior ability can possibly reach the higher levels among the "soft-handers." Second, a majority of workers are unable or unwilling to undergo the long preparation necessary to attain the positions held by the professional groups. Third, many persons are not physically fit to perform the labor required of such workers as engineers. Fourth, the opportunity of advancement is greater in the "soft-handed" group. Fifth, many persons prefer minor "positions" which do not bring them into contact with the dirt and grime of industry to a higher-paid "job" which, in their minds, is dirty and degrading.

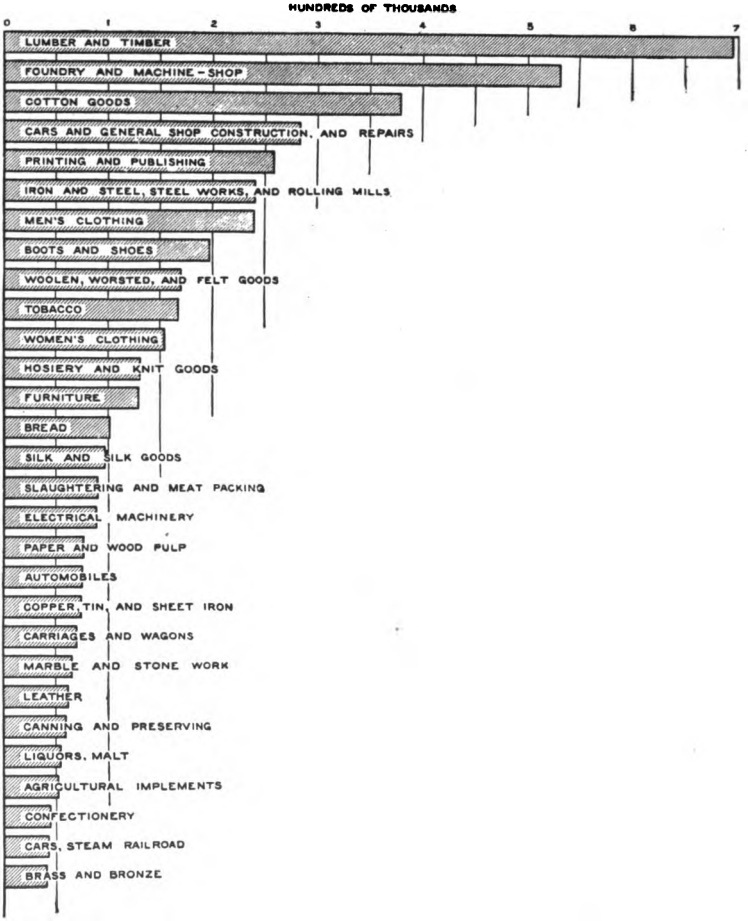
We say that these groups are noncompeting because the members of one group do not compete against the members of another group. The members of each group, however, compete among themselves. This they do both directly and indirectly. Ordinarily, the purchasing power which the typical consumer has to distribute among the members of any one of these groups is fixed within rough limits. What goes to one member must be withheld from another. Money spent for dental work might have been used to pay an architect for drawing a house plan. Indirect competition is also important. Physicians, to be sure, cannot step into the law courts as attorneys, but their children

can easily become lawyers. Likewise, the children of lawyers may take up the practice of medicine. In either case the tendency is, if not to stay in the same profession, to remain in the same noncompeting group, which, in the long run has the same effect.

Movement among the groups. — Certain forces tend to accelerate the movement of individuals from one group to another, while other forces tend to retard such movement. We like to boast of the opportunities which every boy has in this country to follow his bent in choosing a trade or profession. Undoubtedly there are good grounds for this boast. Examples of individuals rising from poverty to affluence are not wanting. Here a great captain of industry began life as an office boy; there a noted physician sprang from the ranks of the illiterate. Less noticeable, because they are less extreme, are the millions of cases of individuals moving from the ranks of unskilled labor to the subgroup above, from farm laborer to farm tenant to farm-owner, from the poorer paid professions to the higher paid ones. Thus there is a constant movement upward. There is also a movement downward, much less in volume and extent than the one upward, and not nearly so important. It is a filtering process largely caused by poor health, misfortune, indolence, lack of ambition, and intemperance.

These movements among industrial groups meet more obstacles than a great many people suspect. The son of an unskilled laborer, other things being equal, has a poorer chance to become a physician, than has the son of a lawyer or a merchant. He lacks, first, a proper home environment; second, an ambition to attain a relatively high industrial position; and, third, the means of getting the necessary preparation which members of the upper groups must have. An examination of the industrial groups of any community will bear out this statement. Suppose we study the family histories of a group

AVERAGE NUMBER OF WAGE-EARNERS BY INDUSTRIES: 1909.



of carpenter's apprentices. Some are almost sure to come from the ranks of unskilled labor, while the rest belong to the skilled mechanics group. Only occasionally should we find among them the son of a lawyer, doctor, merchant, or teacher. Suppose further that we should question the students of medical colleges concerning the industrial status of their parents. A few, but only a few, might answer that their respective fathers were carpenters, or plumbers, or electricians, or even unskilled laborers. Most of them, however, would say that their respective fathers were professional or business men, such as lawyers, dentists, teachers, merchants, and farmers.

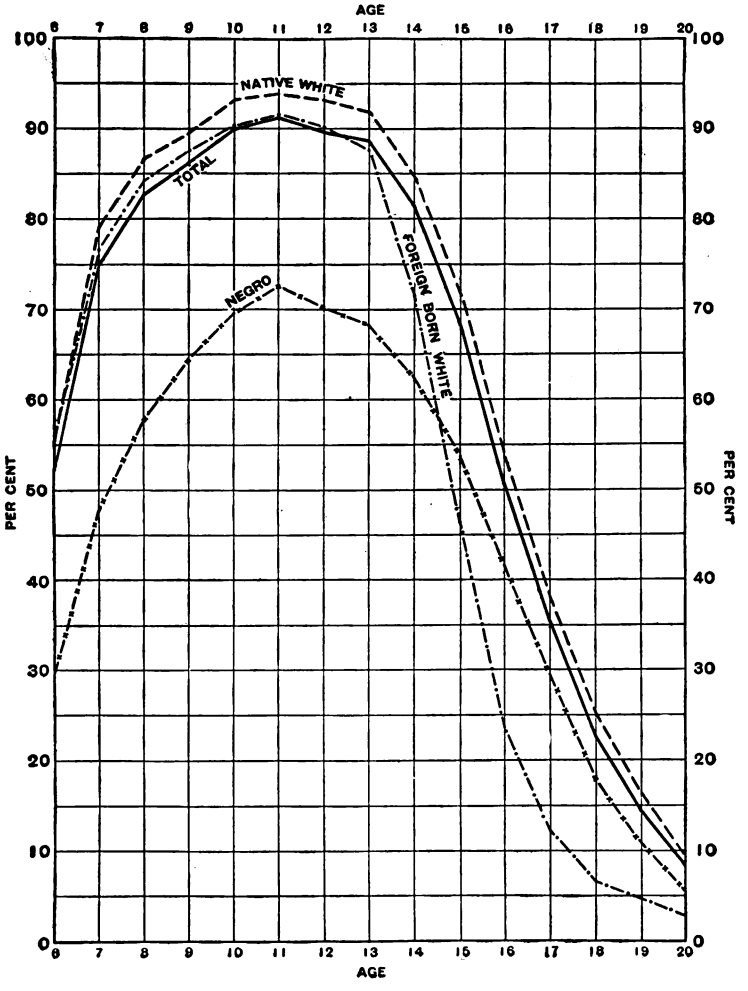
Education and income. — If, as we have said, the students of a professional school or college belong to the upper income groups, the question naturally arises, *What is the relation between public education and income?* One of the reasons usually given for expending large sums of money on public education is that it helps to equalize industrial opportunity — that is, public education tends to start all alike in the industrial race. Just how far is this reasoning valid? It is a well-known fact that an educated person, other things being equal, is more efficient than one uneducated; also that increased efficiency leads to higher incomes. It is equally well known that education beyond the grades, certainly beyond the high school, requires an outlay of money which only a relatively few families can afford to make; and these families, let us not forget, already belong to the higher income groups. Hence, education is not only a cause, but also a result of relatively high incomes.

If we should question the existence of this close mutual relationship, we have but to turn for corroborative evidence to the income schedules which appear in the preceding chapter. There we find a large majority of families getting less than a thousand dollars a year each, while millions of them are compelled to subsist on half the amount. Families with such in-

comes find it increasingly difficult to keep the children in school as they advance from one grade to another. By the time they reach high school age but few of them remain. One after another of those who enter high school withdraw to go into industry, so that by the time the senior year is reached the number left is greatly reduced. The next educational step they find the most difficult of all. So difficult is it that few have the courage to undertake it, for "going" to college or a technical school for a long period of years is not to be faced lightly even by those who have financial backing. Under such conditions it is not difficult to understand why the higher income groups have a virtual monopoly of higher education; and why, as a result, education depends on income quite as much as income depends on education.

Our notion of the ease with which individuals are able to pass from lower to higher income groups is often based on a misunderstanding of the nature of these groups. We point to the fact that a certain successful business man began life as a newsboy, which may or may not be significant in this connection; for not all newsboys by any means belong to the ranks of unskilled labor or even of skilled labor. So it is with boys that sweep out offices, run errands, clerk in stores on Saturdays, or spend their summers on the farm. It is repeatedly pointed out that the farm and the small town serve as excellent sources from which successful city business men are recruited. There is no denying that this has been the case; yet, true as the statement is, it should not carry the implication that these boys were drawn from the lowest income groups. It would be nearer correct to say that a majority of them, despite their success, never leave the group in which they were born; for, from the standpoint of education, there is practically no difference between a family income of two or three thousand dollars a year and one a hundred times as great.

PER CENT ATTENDING SCHOOL IN THE TOTAL POPULATION AND IN CERTAIN CLASSES 6 TO 20 YEARS OF AGE: 1909–1910.



Choosing among income groups. — Obviously, the boys belonging to the higher income groups have an advantage over those of lower groups in the matter of choosing their life's work, and hence, roughly speaking, the size of their wage income. To simplify the problem let us assume that a normal boy about to be graduated from high school is trying to decide whether he will enter business with the view in mind of becoming an enterpriser, of studying for one of the professions, or of learning a trade. What shall be the determining factor in the decision? First of all, he must decide to his own satisfaction the definition of *success*. If to have command over capital and labor, and to enjoy a relatively high income is the goal, then the answer must be *business*. If, on the other hand, his goal is a moderate income combined with leisure and a certain kind of contentment, he ought to choose a *profession* or a trade. In making the choice, however, certain well-known facts concerning the *probability* of success should be taken into account. Business is much like a lottery with its few capital prizes and many blanks. For every successful business man in a large way there is a multitude composed of mediocre ones and failures. Every large city has a throng of struggling shopkeepers to set over against its relatively few merchant princes. The boy, therefore, that would enter business must be prepared to assume the risks which it necessarily entails. In the professions and trades, however, the situation is different. There no huge money prizes and but few blanks exist. Any one with ability enough to complete a high school course can look with a reasonable degree of assurance toward making a comfortable living and a fair financial success as a lawyer, doctor, teacher, engineer, architect, or skilled mechanic. Beyond this a few can go, reaching the financial level occupied by high-salaried officials of railroad or insurance companies; but none can hope to amass the wealth of a Rockefeller or a Carnegie. Now and then we find a pro-

fessional man who has by his own skill and talent accumulated a million dollars, but this is not a capital prize in an industrial society which includes in its membership thousands of millionaires.

69. Efficiency and Wages

Conditions affecting efficiency. — Differences in efficiency of workers may be easily observed on every hand. Sometimes these differences exist in the workers themselves. Two men working side by side at similar tasks often produce unequally. One is alert and nimble; the other, sluggish and awkward. One takes pride in his work, the other grumbles at his lot and watches the clock. Each is the creature of birth, training, and habit. Industrial efficiency varies also from place to place among workers of equal ability. One manufacturing plant, for example, provides recreation grounds, rest rooms, lighted workshops, and sanitary surroundings. Here workers, other conditions being the same, can produce more than can an equal number in a plant less well equipped. Differences among peoples also play an important part in efficiency. A Chinese coolie is no match for an American laborer. One is listless, uneducated, and small of stature; the other, directly opposite in every detail. In China it is a common sight to see four or five men lifting a load which one man in this country could lift with ease.

Wages and industrial efficiency. — Since there are such great differences in degrees of efficiency, the question naturally arises: What is the relation of efficiency to wages? In the case of the two workers side by side, the more efficient one, if they were doing piece work, would get the higher wage. If, as is often the case, the two men had previously agreed to work for the same wage, then no difference would exist, *the wages of either being not greater than the contribution of the less efficient to the product.* Differences in wages may or may not occur when similar work is

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A GROUP OF SCHOOL CHILDREN BEING FED AT PUBLIC EXPENSE.

being carried on in different plants. Clearly, the workers in the better equipped plant will turn out a larger product than those in the poorer plant; yet if the difference is absorbed in paying for athletic fields, rest rooms, and other devices for securing efficiency, the employer has no more to distribute among his employees than does the owner of the poorer plant. We may say, however, with assurance, that physical conditions which contribute to efficiency usually earn more than their cost. When we compare the efficiency of one nation with that of another we are sure to find the most efficient group getting the largest wage. Coolie labor, which we have noticed as being inefficient, is poorly paid. A Chinese unskilled laborer can be employed for a few cents a day, and even at that he is highly paid, for his efficiency is extremely low.

The relation between wages and industrial efficiency is mutual. Stupidity and awkwardness may result, as we noticed in the preceding chapter, from low wages. An underfed workman is in no shape to do his best. He is listless and he soon grows weary with his task. It is an easy matter to say to him that the way to secure an increased wage is to increase his efficiency. It is an entirely different matter, however, to persuade him to make additional efforts without providing him with sufficient food, clothing, and shelter to make the efforts possible. Fortunately, enterprisers like Henry Ford have had the courage to try the experiment of increasing efficiency by increasing wages; and we are told by unbiased observers that these experiments, particularly the one at the Ford plants, have succeeded. Here may be the solution of one of the most perplexing problems in American industrial life.

Women in industry. — One of the pressing industrial questions of the present generation is the relation of the efficiency of woman labor to wages; and this question has been accentuated by conditions growing out of the Great War. The slogan

of organized labor has been "equal wages for equal work," meaning thereby that no distinction should be made between men and women in paying wages for similar work. For a variety of reasons the scale of wages for women has generally been lower than that for men, even when the two groups were doing the same work. Often, however, work appears to be the same when it is not. The mere fact that a man and a woman fill similar industrial positions is no conclusive test of their relative efficiency. One, for example, may need less supervision, or is a more steady worker, or has greater ambition to succeed. Such factors as these are important and must be taken into account in any thoroughgoing discussion of the relation of woman labor to wages. We can do nothing more in this connection than to point out the problems.

70. Methods of Wage Payment

Time and piece wages. — The most common method employed to remunerate labor is to pay according to time or to the labor done. Obviously, time wages are based on piece wages for a group if not for the individual. The same industry often employs both methods. Farmers usually pay their regular help by the month, but employ men to gather corn by the bushel. About coal mines also the wages of some employees depend on output; of others, on time. Organized labor generally opposes piece wages on the ground that the most efficient workers are paid but a fair wage, while those less efficient are underpaid. For this position it is criticized by those who argue that a time wage takes from the highly efficient and gives to the inefficient. Yet as labor leaders say, the interests of the few who might possibly profit from a system of piece wages must give way to the larger interests of the whole group.

Piece wages in some industries are impossible. What scheme could be devised for paying house carpenters according to their

output? Ordinarily, the product of one cannot be separated from the products of others on the same job. Likewise the store clerk, while he may get a commission on his sales, must be paid time wages for his time spent in *trying* to sell goods, and in doing various other duties about the store. We may say, therefore, that piece wages can be best paid in those industries where each worker's product is distinguishable from the products of his fellow workers.

Profit-sharing. — Numerous schemes have been devised by employers to increase output by giving the employees an interest

Courtesy of Postum Cereal Co., Battle Creek, Michigan

MODEL WORKMAN'S COTTAGE.

This is but one of many homes which a large manufacturing plant in the United States helped its employees to build.

in the product. One of these, profit-sharing, because of its importance, deserves passing notice. This plan in general provides that at stated intervals each employee shall receive, in

addition to the wages which he has drawn regularly each week or each month, a share of the profits of the business. Usually no provision is made for the employee sharing in any loss. Numerous concerns in the United States have tried out this plan with varying success. Some have condemned it after trial, others have praised its effect on their business. Its highest development has taken place abroad. In Paris, for example, a company of house painters instituted the plan years ago with the result that in time the employees themselves owned the business. Organized labor has generally opposed profit-sharing on the ground that an employer can pay bonuses at stated periods only by withholding from his employees what is rightfully theirs in the form of regular wages.

EXERCISES AND PROBLEMS

A

1. What is the difference between wages, and wages of management?
2. On what ground may workers be divided into hard-handed and soft-handed groups?
3. Why are railroad men often referred to as the "aristocracy of the hard-handed group"?
4. What is meant by the expression "noncompeting groups"?
5. Just how do doctors and lawyers compete? plumbers and electricians?
6. What is the relation between education and income?
7. What are the exact facts about the movement of persons from one income group to another?
8. What should be one of the guides in selecting a profession or a trade?
9. What is the relation between efficiency and wages?
10. How does the working environment affect efficiency?
11. Why is the cheapest labor often the highest paid?
12. Why do business men usually refuse to pay inefficient employees more than they earn, trusting thereby to increase their efficiency?
13. Should men and women receive the same wages for the same work? Discuss.

14. What is the difference between piece wages and time wages?
15. Which is the more fundamental?
16. Why does organized labor generally oppose the piece-wage system?
17. Define "profit-sharing."
18. What does profit-sharing attempt?

B

1. Determine by inquiry the occupation or profession of the father of each lawyer and doctor in your community.
   a. How many were lawyers, doctors, or business men (including farmers)?
   b. How many were unskilled laborers?
   c. Explain any marked differences that appear between the occupations of the fathers of the younger men on your list and the fathers of the older ones.
   d. Formulate conclusions on your investigation as to competition between members of the same noncompeting group.
2. Let each student in the economics class state the profession or occupation he expects to pursue.
   a. How many expect to compete directly with their respective fathers?
   b. How many expect to enter other lines in the same noncompeting group?
   c. How many expect to cross over into a group not occupied by their respective fathers?
   d. What does this examination show regarding the ease with which lines between noncompeting groups can be crossed?
3. Make a list of several natives of your community who have made exceptional success in business.
   a. How did their respective fathers rank in the community as to income? as to wealth?
   b. What were their educational opportunities?
   c. Considering differences in time and circumstance, can they offer their children better educational opportunities than they themselves enjoyed?
4. Call to mind boys engaged in selling newspapers, in sweeping out offices, or in similar occupations.
   a. From what income groups do these boys come?

b. How many are the sons of well-to-do parents?
c. How many attend high school?
d. How does society in general regard this kind of work by boys?
e. How do the boys themselves regard it?

C

1. The statement is often made that many college graduates may be found in the bread lines of our cities.
   a. What effect on the popular mind has the discovery of one college graduate begging for food?
   b. Does such a discovery make an interesting news item? Why?
   c. What is the probability of magnifying such a discovery?
   d. What is the probability of such a beggar pretending to be a college graduate?
   e. How, therefore, should the statement be regarded?
2. "It can easily be proved from history that a majority of the successful men of the United States were reared on farms and attended country schools."
   a. Until recent times, where else could an American youth be reared?
   b. Where else, except in the country school, could the previous generation get an education?
   c. What is likely to be the trend in coming generations?
3. Discuss the need of profit-sharing in American business affairs, its probable success, and the results that may be expected.

SUPPLEMENTARY READING

BULLOCK, *Introduction to the Study of Economics*, 3d ed., pages 446–460.
ELY, *Outlines of Economics*, 3d ed., pages 427–443.
FETTER, *Economics*, Vol. I, pages 211–231.
FISHER, *Elementary Principles of Economics*, pages 433–463.
JOHNSON, *Introduction to Economics*, pages 151–172.
SEAGER, *Principles of Economics*, pages 244–261.
SELIGMAN, *Principles of Economics*, 5th ed., pages 411–428.
TAUSSIG, *Principles of Economics*, 2d ed., Vol. II, pages 147–157.

CHAPTER XXIII

THE LABOR PROBLEM

71. Rise of Organized Labor

Rise and growth of the trade union. — The forces which have combined during the past generation to cause employees to organize were of slight importance prior to the Civil War, and even for several years after its close. Then the number of laborers in any one establishment was relatively small; and the opportunity to hold conventions, poor. Besides, the abundance of public land provided an escape for those who worked for wages. Accordingly, only a few small unions were organized prior to 1860, and these practically disappeared during the four years' conflict that followed. The return, in 1865, of more than a million soldiers to the ranks of industry, the rapid disappearance of desirable and accessible public lands, and the steady increase in the size of manufacturing plants, soon began to create a feeling, particularly in the eastern states, that laboring men ought to organize for mutual protection and advancement. About this time there were held several labor conferences which declared (1) for an eight-hour day, (2) for restriction on immigration, (3) for reduction of the tariff, (4) for a relatively small standing army, (5) for early payment of the national debt, and (6) for the granting of public land only to actual settlers. Gradually each trade or craft organized, until at the present time practically all skilled trades have their unions.

Knights of Labor. — The unions which we have just noticed are organized according to trades; that is, the carpenters, the

plumbers, the bricklayers, and others, have each their own organization. In 1869, however, a Philadelphia tailor, U. S. Stevens, projected an entirely different kind of organization, known as the Knights of Labor, in which trade distinctions should not appear. Membership at first was restricted to garment workers, but later it was thrown open to all except bankers, lawyers, professional gamblers, and employees in the manufacture or sale of intoxicating liquors. Membership in a trade union was no bar to becoming a "Knight." Thus, the two types of organization grew side by side without organic connections. The aims of the Knights of Labor were to secure better conditions for its members through participation in politics rather than by the strike or boycott. The slogan of the organization was, "An injury to one is the concern of all." Thousands of " lodges " scattered throughout the country were the local units. These were closely supervised by the national officers. Thus, the organization was highly centralized — that is, the local lodges had little autonomy. In other words, authority came from the top.

American Federation of Labor. — Membership of the Knights of Labor reached its highest point (about five hundred thousand) in 1886. Already it was feeling the oppositional influence of the American Federation of Labor, which had been organized in 1881. A little later the older organization began to decline in influence; at the present time its place in labor affairs is unimportant. The two organizations are unlike in several respects. The Federation favors the strike and boycott as weapons for fighting the battles of labor. Moreover, as its name suggests, it is a federation of trade unions, each governed by its own laws and managed by its own officers. Individual members of the trade unions and even the local organizations have little direct connection with the Federation. Besides the national organization there are state federations and city federations.

Practically all of the leading trade unions of this country belong to the Federation, the most notable exception being the railroad brotherhoods. Since its inception, the American Federation of Labor has been instrumental in improving conditions of labor and in raising wages.

Industrial Workers of the World. — A sharp distinction must be made between a trade union and an industrial union. One includes only workers in a particular trade. The other, and in this respect it resembles roughly the Knights of Labor, includes all workers of an industry such as mining or building. Such a union is the Industrial Workers of the World (I. W. W.), which contends that the interests of labor are too closely knit together to permit its members to be divided among numerous trade unions. Hence, the two types of unions are opposed to each other. The officers of the American Federation of Labor during the past few years have repeatedly criticized both the aims and the acts of the I. W. W., and warned members of trade unions not to affiliate themselves with that organization. The I. W. W. in its battles with employers has used a new weapon known as *sabotage*, which may be defined as a "strike on the job" — that is, a strike without quitting work. This is accomplished by disabling machinery or spoiling the product. In either case the employer soon knows that he is being fought by an unseen foe, for seldom is the *guilty individual* ever caught. Consequently, he must do one of two things: comply with the demands of his men or get a new labor force.

72. Aims and Methods of Organized Labor

Bargaining power of the worker. — The more zealous advocates of the *laissez-faire* doctrine in business have insisted that the wage any worker should receive ought to be determined by a bargaining process between the worker and his employer. Less than a century ago this method prevailed in all industries, and it

still persists in fixing the wages of farm laborers, rural schoolteachers, and store clerks. Obviously, the worker is not on a level with his employer in the matter of bargaining. A factory owner who employs one hundred hands can usually get along very well if one of the hundred should quit work; also the hiring of a hundred-and-first man is of no great consequence to him. In either case his net income would ordinarily be affected but slightly. The hundred-and-first man, however, has no such choice. He *must* find an employer. He is likely to offer his services eagerly, while the employer may meet his advances with indifference. Hence, under such circumstances, the employer, if he bargains with each of his workers separately, has a decided advantage over them. This significant fact laborers clearly recognized long before their organization into unions. It is not surprising then that the chief aim of organized labor is to unite workers for the purpose of bargaining as one man. This is known as *collective bargaining*. Under these conditions the employer can no longer regard the hiring of laborers with indifference; for now instead of dealing with each individual separately, he finds it necessary to deal with the whole force as one man. Their refusal to work threatens his profits. This group, therefore, can bargain on an equality with the employer.

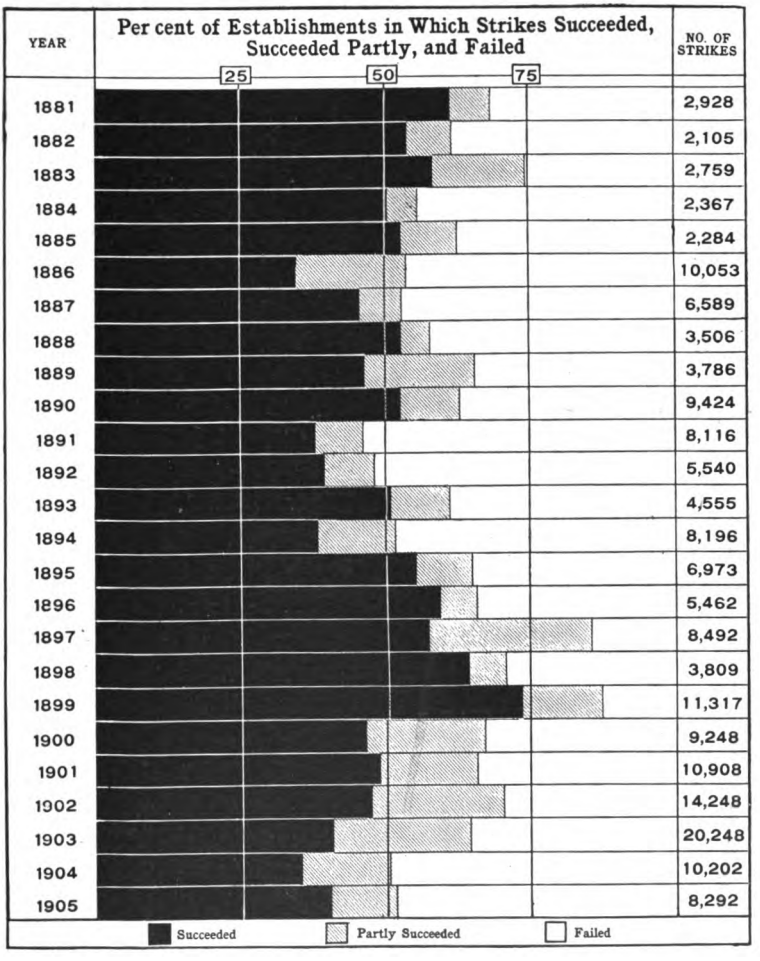
Specific demands of organized labor. — Speaking generally, the demands of organized labor may be grouped under three heads: (1) higher wages, (2) shorter working day, (3) better working conditions. Since there must be some relation between the productivity of labor and the size of its wage, the question naturally arises: From what fund shall an increase in wages be paid? It may come from what the employer has formerly enjoyed as profits, from consumers in the form of higher prices, or from the laborers themselves — provided an increase in wages increases efficiency. Usually, we may safely assume, the increase comes from the first or second fund, probably a

portion from each of them. The shortening of the work day, however, appears to have been generally offset by an increased efficiency; that is, a man turns out as much product in ten hours as in twelve hours, owing to his ability to increase his hourly exertion during the shorter day. Likewise, in many occupations an eight-hour day is as good as a ten-hour day, and in some kinds of labor a working day of seven or even six hours may be employed to advantage. The relation of improved surroundings to output is not so easily determined. Those in a good position to judge, however, claim that in many cases, perhaps in most, employers are compensated in the long run for their expenditures in this direction.

Open and closed shops. — Less important, largely because it is less widespread, is the demand of organized labor for the closed shop. The closed shop is one in which only union laborers are employed, while in an open shop membership in a union is not required. Obviously, organized labor prefers the former kind of shop, but often circumstances are such as to force it to permit its members to work alongside what union men call "scabs." Occasionally, employers will not hire union men under any circumstance. Thus in reality there are three kinds of shops: open, closed, and nonunion. Closely related to the question of open and closed shops is the question of open and closed unions. Some unions are closed; that is, the difficulty of gaining admission, because of the long apprenticeship required or because of the high entrance fee charged, is so great as to give its members a virtual monopoly of their trade. Others are said to be open. Almost any one can on the payment of a nominal fee become a member. Many authorities believe that here lies the solution of the problem of organized labor, since the ends of both employer and employee, they contend, would be gained by making all shops closed and all unions open.

Methods employed to force the demands of labor. — The chief weapon employed by organized labor to get higher wages, shorter working hours, and better surroundings has been, and is now, the *strike*. To strike means to quit work in a body. No other method has been found to be so effective, since the employer as well as his striking employees feels the evil effects of idleness. Usually strikers have the moral support of the general public, which may be secured and retained by advancing moderate demands and by abstaining from violence. Often in spite of the exercise of due care, individual strikers, and even groups, breaking away from restraint, hurt the cause by committing acts of lawlessness. Especially is this likely to happen when the employer attempts to continue his business operation by employing nonunion laborers, known in union circles as "scabs." Sometimes these nonunion men are *bona fide* workers; sometimes they are strike-breakers, who follow the dangerous calling of filling *temporarily* the place of men on a strike, irrespective of the nature of the work. They run great risks and are paid high wages. When unemployed they usually loaf in low-class saloons, ready at a moment's notice to assist in breaking a strike if the employer is willing to pay their price.

The claim is frequently made that the loss of wages caused by strikes is greater than the increases gained by the strikers that win. This claim, while it has some foundation, is exaggerated. From the best available data on strikes and their cost, we are justified in concluding that the per capita annual cost of strikes in this country during the past generation, if spread over all employees, is small; also that if the cost be confined to organized labor it is not prohibitive or even excessive. To say that strikers have lost a billion dollars in wages since 1880, is estimating the cost in one way; to say that the per capita annual cost to all employees is one dollar, is estimating it in another way. The leading authority on English labor history asserts


YEAR
Per cent of Establishments in Which Strikes Succeeded, Succeeded Partly, and Failed
25
50
75
NO. OF STRIKES
1881 2,928
1882 2,105
1883 2,759
1884 2,367
1885 2,284
1886 10,053
1887 6,589
1888 3,506
1889 3,786
1890 9,424
1891 8,116
1892 5,540
1893 4,555
1894 8,196
1895 6,973
1896 5,462
1897 8,492
1898 3,809
1899 11,317
1900 9,248
1901 10,908
1902 14,248
1903 20,248
1904 10,202
1905 8,292
Succeeded
Partly Succeeded
Failed

that the annual strike loss sustained by English employees is not greater than the loss caused by an extra half-holiday each year; that is, that the loss sustained by each English laborer is equal to a half day's wages. Dissatisfied employees may also resort to the boycott, which simply means that they, assisted by their friends and sympathizers, refuse to buy goods of the employers against whom they have a grievance.

Public opinion and the strike. — Both employers and labor leaders recognize the importance of securing the moral support of the general public, for the side which secures it almost always wins. The public, however, usually has little concern in a strike unless it is directly affected. The machinists on a well-known railroad went on a strike a few years ago and remained out for several years. *Few* people gave it any attention. Even those residing in the same city where the shops of the road were located scarcely noticed it. While the strike of the machinists was dragging itself out, the street-car men of the same city quit work because their demands for higher wages had been refused. Within an hour the whole city was aroused. Meetings of prominent citizens were called. Committees were appointed to try to arbitrate the differences between the car company and its striking employees. Even the mayor brought the influence of his office to bear on the struggle. Within twenty-four hours the matter was settled, the strikers getting the wage increases which they had demanded. We may ask why the people took such an active interest in one strike and practically none whatever in the other. One compelled them to walk to their work; the other, as far as they could see, did not concern them. In one, the people sympathized with the strikers; in the other, their sympathies were not enlisted.

Employers' weapons. — It would be a mistake to suppose that the employer is defenseless against his striking employees First, there are various employers' associations, such as the

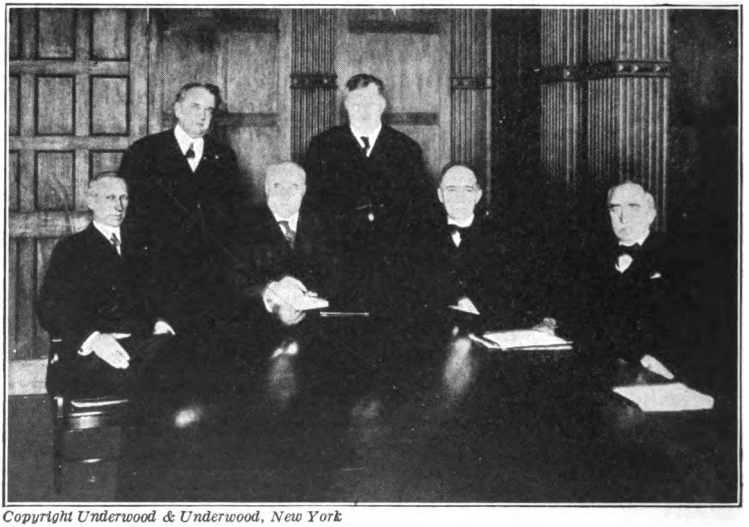
American Manufacturers Association, organized among other purposes for mutual protection against the demands of labor. Second, an employer may, if his property is threatened with injury, call on the courts for protection. If the court acts favorably, the presiding judge issues an *injunction* against the striking employees, which in the past has proved to be an effective weapon against labor. Violation of an injunction is contempt of court, punishable by fine or imprisonment or both at the discretion of the judge issuing the decree. Consequently, organized labor regards the injunction as dangerous to the best interests of the workers, and urges at every opportunity the passage of laws that will take such broad powers out of the hands of judges. Finally, the employer has the support and protection of the state, which guarantees to each one the right to carry on his business as he sees fit, as long as he keeps within reasonable bounds.

73. Methods of Settling Labor Disputes

Conciliation. — A variety of methods for settling labor disputes has grown up in this country. One of these is known as *conciliation*. Usually neither party to a labor dispute can see the merits of the other's claims. Oftentimes a third party, either an individual or some government agency, can, by talking with the strikers and then with the employer, remove many of the differences separating them. In other words, the conciliator merely tries to bring the two disputing parties to a mutual understanding of the issues involved. Conciliation implies persuasion, not force. It means investigation, not award.

Voluntary arbitration. — As soon as the employer and his striking employees are agreed to try to settle their differences peacefully they are ready for arbitration. The usual practice in this country has been for each side to select an equal number of arbitrators, the arbitrators themselves selecting another so as

to avoid the possibility of a tie vote. Each side then presents its case. The strikers explain their grievances, and submit as much proof as possible in an effort to prove that the employer ought to remove their cause. If the question of wages is the cause of the strike, the men are likely to argue not only that they are entitled to a raise because business conditions will



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AN ARBITRATION BOARD.

permit it, but also that their present wage is inadequate to support their families properly. The usual contention of the employer is that any increase in wages will ruin his business. The arbitrators soon learn, if indeed they do not know already, that the claim of each party is likely to be greater than its expectation. This is but natural since arbitration means compromise. It is their business then to sift all the evidence offered and even to make investigations of their own. Finally, they

render a decision, which ordinarily both sides accept in good faith. Occasionally, however, one or the other party to the agreement, becoming dissatisfied with the award, finds a pretext for undoing all that the arbitrators have done.

Compulsory arbitration. — In some countries, particularly New Zealand and Australia, arbitration of labor disputes is a government matter. There the state steps in when troubles arise, and compels the employer and his employees to submit their differences for settlement to the proper public officials. Under these conditions strikes seldom occur. Nothing so strict has been attempted in the United States. Here both employer and employees are inclined to resent any interference on the part of the government in what they call their " private affairs." Some of the states have adopted partial measures by providing permanent arbitration boards to serve if mutually agreeable to both the employer and his striking workmen. No board, however, has power to compel either party to the dispute to submit its differences. In other words, it can usually do little more than passively look on unless called in by both sides. Whether or not we shall ever go as far as New Zealand or Australia has gone in the matter of compelling the arbitration of labor troubles is a mooted question. Just now the employers regard this extremity much more favorably than do employees; and naturally so, for the last few years has seen a remarkable growth in the strength and solidarity of organized labor.

74. Labor Legislation

Need for labor legislation. — Up until a century ago practically all labor legislation favored the employing classes. The evils growing out of the English industrial revolution, however, forced Parliament to give attention to legislating for employees, particularly for women and children. Gradually there grew up in England a system of labor laws that had for their end the

regulation of hours and conditions of work. Women, for example, were forbidden to work in mines, while the employment of children under a certain age was prohibited. The influence of organized labor in that country, aided by a commendable spirit among the governing classes, has done much during the past century to make English labor laws the best in the world. It was not until much later that the lawmakers of this country took up seriously the question of labor legislation. Massachusetts was the first state to make a thorough investigation of labor conditions, upon which some excellent laws were later based. Other states followed the lead of Massachusetts until now all of them have done something in the way of regulating conditions of labor within their respective jurisdictions. Here, as in England, chief attention has been given to women and children. Neither of these classes is as competent as men to protect its own interests. Neither is as physically strong. Neither is organized so well. Moreover, the well-being of the next generation depends on the strength and vigor of the women and children of this generation.

Obstacles to labor legislation in the United States. — Legislation for the protection of workers in this country has encountered several obstacles, three of which deserve notice in this connection. First, the typical American has always strongly insisted on the right to pursue his own economic course without the interference of government agencies. Even when he found himself at a disadvantage, he was enough of a fighter to want to stand on his own feet. Second, the great number of lawmaking bodies in this country (Congress and forty-eight state legislatures) makes uniform legislation impossible. Consequently, each state legislature hesitates to enact any labor law that might drive industry into some other state. A state law, for example, which would set the age limit of children permitted to work in cotton factories at a higher point than some neighbor-

ing state had set it, would run the risk of losing some of its cotton factories. Third, the courts of this country, both state and federal, have declared many labor laws to be null on the ground that they were contrary to the Constitution of the United States or to the constitution of the state to which they applied. As a result, the will of the people has been thwarted, unconsciously to be sure, by constitutions drawn before the need for labor legislation had arisen.

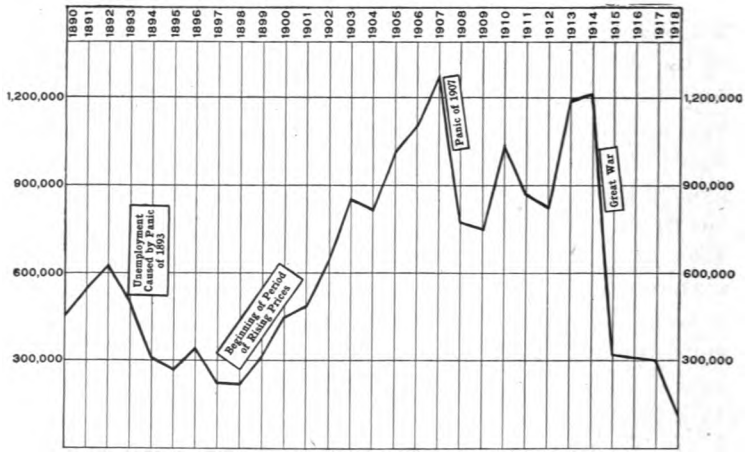
Character of labor legislation in the United States. — In spite of these obstacles, the national government and the various states have enacted a great many labor laws. In many of the states women and children are fairly well protected, not only against unscrupulous employers, but also, strange as it may seem at first, against themselves. In passing on these laws, however, the courts have often been compelled to shut their eyes to the Constitution of the United States, which guarantees the right of every citizen to make contracts. In the case of men they have not been so lenient. In fact, except in the most extreme cases, or where the public interest was directly involved, the courts have usually declared those laws to be unconstitutional which restrict the rights of adult males to enter into whatever labor contracts they please. Yet it seems safe to say that the trend of the times is toward restrictive labor legislation for men, for it is practically impossible to separate the welfare of the individual from the welfare of society. Hence we have laws abolishing the manufacture of certain kinds of matches; others regulating hours of labor in deep mines; and still others, restricting the number of hours railroad crews may work.

75. Foreign Immigration

Immigration and labor. — Immigration, since it affects wages and standards of living, is essentially one of the aspects of the labor problem. Since the organization of our government in

1789 approximately thirty million foreigners have come to the United States. Practically every adult member of this vast army became a wage-earner as soon as he arrived, competing directly or indirectly with the wage-earners who were already here. Until a generation ago most of the immigrants came from northwestern Europe, chiefly from Great Britain, Ireland, Germany, and the Scandinavian countries. Just as this flow of human life to the new world slackened, another from southern

FOREIGN IMMIGRATION INTO THE UNITED STATES: 1890–1918.

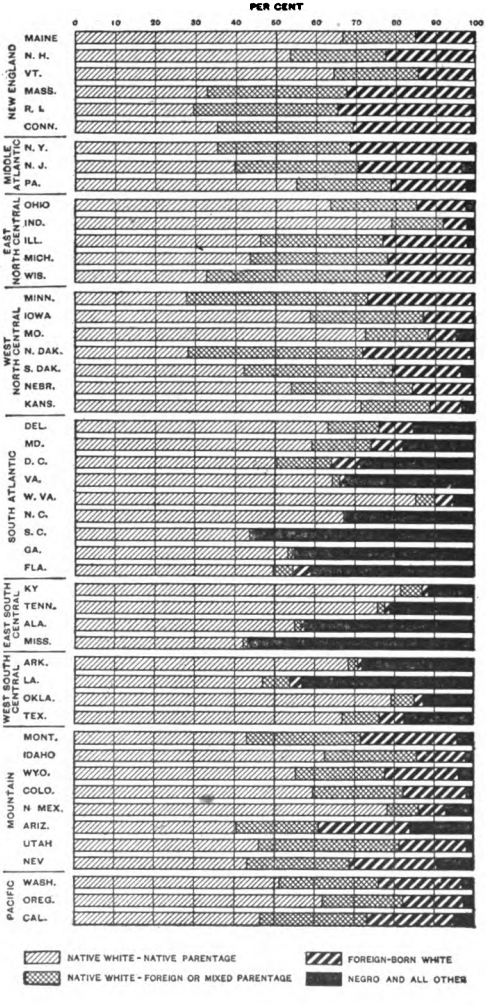


and central Europe began, and continued with increasing volume until the outbreak of the Great War. This we call the "newer immigration." Its chief source was southern Italy, Greece, Austria-Hungary, and Russia.

Economic aspects of the newer immigration. — The newer immigration, as contrasted with the older one, has several important characteristics. First, its members are unskilled, without funds, and highly illiterate. Consequently, they have for the most part congregated in the cities and about coal mines.

They have filled the lowest industrial positions, and often worked for wages much below what a native worker would have accepted. Ignorant of the laws and customs of the country they have suffered at the hands of unscrupulous employers and "bosses," being compelled to work long hours under revolting conditions. Because of these facts, organized labor looks unfavorably on unrestricted foreign immigration. Labor leaders see in it a weapon which may in time be turned against them by the employer. They see also, they say, the hopelessness of the task of trying to instill in the mind of the typical immigrant from southern

COLOR OR RACE, NATIVITY, AND PARENTAGE, BY STATES: 1910.



Europe the importance of organization. This type of immigration, however, is somewhat of an asset which we must not overlook. It does the "dirty" work which Americans have come to regard with disfavor. It furnishes, without expense of rearing, a vast labor force. And finally it provides an annual market for hundreds of millions of dollars' worth of products turned out by native American workmen.

Social aspects of the newer immigration. — Much of the opposition to the newer immigration would not exist, we may say with assurance, if it were possible, as it was with the older immigration, for the native stock to absorb it. The English, Irish, or German immigrant of the earlier period was much like the people he found here. All sprang from the same general stock. All had similar political ideals. The typical Italian immigrant, on the other hand, cannot adjust himself so easily. To the average American he is a stranger, inferior in every way — industrially, socially, morally. He finds the door closed to him and his family. He remains Italian. What is worse, his children remain more or less Italian. In short, the American melting pot seems to have lost its heat. As a result he keeps with his own kind, clings to his own customs, manners, and language, and never really becomes a part of the broad current of American life. Because of his isolation, organized labor too often regards him as undesirable. As it is with the Italian immigrant so it is with practically all the immigrants from the other countries of southern and central Europe.

EXERCISES AND PROBLEMS

A

1. What three forces operated before the Civil War to prevent the organization of labor?
2. How did the war itself affect these forces?

3. In what essential respects do the Knights of Labor differ from labor unions? from the American Federation of Labor?

4. Distinguish between a trade union and a labor union.

5. Why are the Industrial Workers of the World objectionable as an organization?

6. Why is "sabotage" such an effective weapon against the employer?

7. Just why is the employee at a disadvantage in bargaining?

8. How does collective bargaining remove this disadvantage?

9. Explain how a laborer can do more work in eight hours than in ten hours.

10. What are the three specific demands of organized labor?

11. How effective is the force of public opinion in settling strikes?

12. Why is the employment of strike-breakers so objectionable both to organized labor and to the public generally?

13. What is the essential difference between conciliation and arbitration?

14. How does voluntary arbitration differ from compulsory arbitration?

15. What obstacles have hindered labor legislation in the United States?

16. Why have the courts distinguished between men and women in passing on the constitutionality of labor laws?

17. Why in general does organized labor favor restrictions on foreign immigration?

18. What is the chief cause of the general objection to the newer immigration?

B

1. Consult with an official of a local union.
   - *a.* Get his viewpoint on the labor situation in general.
   - *b.* Inquire about specific rules of work enforced by his union.
   - *c.* Discuss with him the attitude of organized labor towards socialism.
   - *d.* Ask him about any strike experiences he may have had.
2. Call to mind any industrial strike that may have been carried on in your community.
   - *a.* Was the public vitally interested in the strike?
   - *b.* Were strike-breakers imported?

c. Did the strikers picket the plant in which they had formerly been employed?

d. Which party to the strike was the more eager to arbitrate?

e. Did the state make any effort to settle the strike?

f. What was the outcome of the strike?

3. From a census report or from some other reliable source get statistics on the number of persons in your community who are foreign-born or who are native-born of foreign parentage.

a. Which nationality shows the greatest strength?

b. Is the parentage of "foreigners" in your community above or below that of the United States? your own state?

c. How many children of foreign-born parents attend your school?

4. Ask each student in the class to state the nationality of his father, mother, both grandfathers, and both grandmothers.

a. How many are "Americans"?

b. Are any pure English, Irish, German, or Scotch?

c. How many are descended from two or more of the four stocks?

d. Formulate conclusions as to the mixtures of these old stocks.

C

1. One of the cardinal policies of trade unionism is that all of the members of any union should, within narrow limits, receive the same wage.

a. Does such a policy hinder the more skilled workers? How?

b. How do labor leaders justify this policy?

c. What determines the wage for such a group?

d. Why should not the wage for the same kind of work, plumbing say, be the same for the whole United States?

2. Organized labor is often criticized on the ground that it opposes the introduction of new machinery and new processes.

a. Is there likely to be any basis for this criticism?

b. Would organized labor be justified in taking such a position? Explain.

c. How would such a policy affect production? the wages of organized labor? the wages of unorganized labor?

d. What would be your position in the matter if you were an employer? a member of a trade union?

3. Many of the wisest labor laws enacted by Congress and the state legislatures have been declared unconstitutional by the various courts.
   a. What is meant by the expression "unconstitutionality"?
   b. Where did the courts get this power?
   c. What procedure is necessary to make such laws constitutional?
4. "America is a great melting pot in which the peoples of Europe are transformed into Americans."
   a. Explain what is meant by "melting pot."
   b. How effective is the melting process just now?
   c. What experiences caused this expression to be coined?
   d. Should it be modified in any respect? Just how?

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CHAPTER XXIV

RETURN TO LAND (RENT)

76. Nature and Source of Agricultural Rent

Contract and economic rent. — The word "rent" is used in our everyday speech in a variety of ways. We speak of renting an automobile, or a team of horses, or even a dress suit or a pocket camera. Usually in such cases, the term "hire" would be more applicable; for it adds to clearness to restrict the use of rent to *land*, or at most to land and its improvements. Even then we may have two kinds of rent, contract (commercial) and economic. Contract rent is a mere matter of agreement between two parties, and it may or may not be equal in amount to economic rent. If I agree to pay Mr. X $100 a year for the use of his ten acres of land, the $100 is contract rent irrespective of the location or fertility of the ten acres. The principle developed in the discussion of market price applies in the matter of contract rent. The landowner, like the seller of goods, has a *minimum* rental value in his mind, while the prospective renter has a *maximum* value; each bases his estimate on what he believes is the economic rent of the piece of land under consideration. As a result contract rent *tends*, in actual practice, to approximate economic rent.

Source of agricultural economic rent. — Economic rent, unlike contract rent, cannot be determined by bargaining. Nor is it necessary that a piece of land be rented to a tenant in order that its economic rent may appear. The owner of a farm re-

ceives economic rent just as truly when he himself operates it as when he permits a tenant to operate it.

The simplest approach to an understanding of economic rent is made by examining an ideal situation in which only a few persons are concerned. Let us assume, therefore, that ten families take up their residence on an isolated island composed, let us say first, of several different kinds of soil. Let us assume also that one of the families engages in wheat-farming on the land best adapted to wheat, while the other nine engage in fishing, manufacturing, or commerce, or even in some other kind of farming. Obviously, the wheat farmer can raise wheat cheaper than any other one — say 80 cents a bushel — for he has the best wheat land. As the number of people on the island increases, more wheat will be necessary and consequently more wheat land will need to be brought under cultivation. Necessarily the farmers that take up wheat-raising must resort to a poorer grade of wheat land than the first farmer possesses. But they will not grow wheat even on free land unless the price of wheat is high enough to return to them interest on their capital and wages for their labor. We may expect under the increased demand for wheat that the price will rise, say to $1.00 a bushel. Under these new conditions the first wheat farmer, without having his expenses increased, will enjoy the increased price of 20 cents a bushel. If his land produces 40 bushels per acre it yields him an economic rent of $8 (40 times 20 cents) per acre. As population continues to increase, the extra demand for wheat forces its price upward. Farmers will then resort to the cultivation of poorer wheat lands, with the result that our first wheat farmer, also all the others except the one on the poorest piece of wheat land, will get an additional income which we call economic rent. We may say, therefore, that one of the sources of economic rent is the differences that exist in the fertility of soil.

We might have assumed that all of the land on our islands was of the same fertility. Suppose that nine of the ten families settle in a village, while the tenth family takes up the nearest piece of land for wheat-farming. Here again an increase in population will increase the demand for wheat with a corresponding increase in price. Consequently, other families will take up land for the purpose of growing wheat. This land, according to our assumption, is as well adapted to wheat-raising as the first farmer's land, *but not so well located in reference to the village market.* The second farmer, therefore, will be compelled to undergo transportation expenses from which the first wheat farmer is free. Since the price of wheat is uniform in the village market, the first farmer will enjoy an advantage over the second farmer. Here is a second source of economic rent. A complete explanation of the sources of economic rent is beyond the scope of this book. We may say, however, that *economic rent arises from differences;* in agriculture it arises chiefly from differences due to fertility and location.

No-rent land. — We may assume, to continue our island illustration, that the ten families compete among themselves for the *one* fertile piece of wheat land to the point where the family which secures it merely gets return for the labor and capital employed in its cultivation. Under these circumstances this land, though it was the most fertile or the best located piece on the island, is no-rent land; that is, it yields no rent either to its owner or to its cultivator. In Fig. 9 we see graphically the effect of increasing demands for wheat in our island settlement. When the settlement was first made the price of wheat was OL per bushel while the cost of raising it (interest and wages) was the same; that is, it was produced on no-rent land. Just as soon, however, as an increased demand for wheat compelled the utilization of a poorer piece of land (poorer either in fertility or in location) for wheat-growing, the price per bushel was neces-

sarily raised. Otherwise, no one could afford to raise wheat on a poorer piece of land, for the cultivator of the best piece was merely getting a normal return on his capital and labor. The rise in price per bushel gave the wheat-grower on the best piece of land a surplus over his outlay in the form of wages and interest. This surplus we call economic rent. Its size is determined by the difference between his capital and labor costs

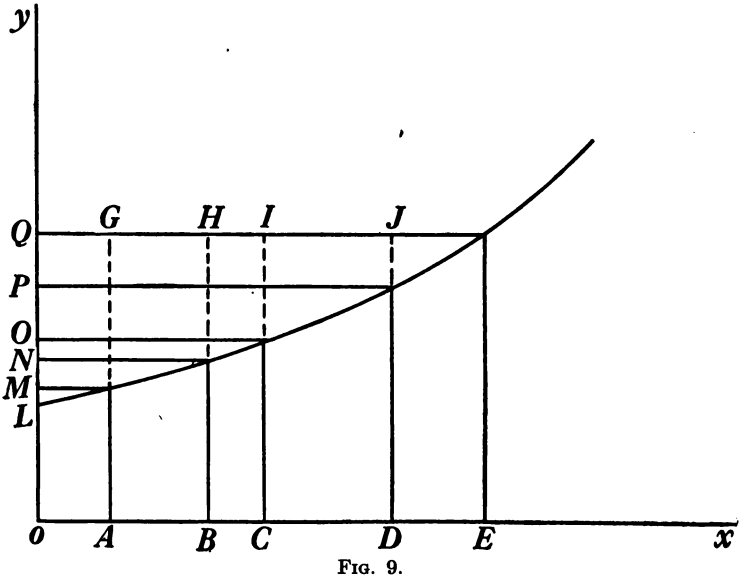


FIG. 9.

and the capital and labor costs of the second cultivator, who utilizes no-rent land. Let us suppose, further, that an increase in population causes five other pieces of land to be utilized at varying costs in the way of interest and wages (represented by the solid vertical lines A, B, C, D, and E). Clearly, the price per bushel would have to be fixed at not less than E. Then the surplus per bushel (economic rent) going to our first farm

would be LQ; to the next best piece, G (MQ); to the third, H (NQ); to the fourth, I (OQ); and to the fifth, J (PQ).

Usually we think of differences in yield per acre rather than differences in the capital and labor costs per bushel. Let us suppose that five cultivators, each using exactly the same amount of labor and capital on equal-sized pieces of land, produce the following numbers of bushels per acre: 40, 32, 30, 25, and 20. Since the fifth man will not farm without getting a return for his interest and wages, we may conclude that twenty bushels of wheat per acre equals in value the outlay of each farmer. Hence the economic rent of the five pieces, measured in bushels, is 20 (40−20), 12 (32−20), 10 (30−20), 5 (25−20), and 0 (20−20).

77. Urban Rents

Different kinds of urban sites. — We are now prepared to extend to urban rents, with some modification, the principles we have just learned. Obviously, *fertility* is not a factor in determining the selection of an urban site. Hence, *location* alone will claim our attention in this discussion. Urban sites might be divided into an infinitely large number of groups, but for our purpose two will suffice: residence sites and business sites. It is a matter of common knowledge that some store sites more than others are desired by merchants. Usually the determining factor in retailing is the size of the crowds that pass certain points during the day. A department-store owner has the option of utilizing a site near a busy down-town corner, or he may locate his stock of goods somewhere in the residence district, or even out in the desert, where land is free for the asking. We may say at once that if he is a wise merchant he will not try to operate his store in the residence district, certainly not in a desert. Here we have the principle of site rent. The down-town business lot, like our best located farm on the

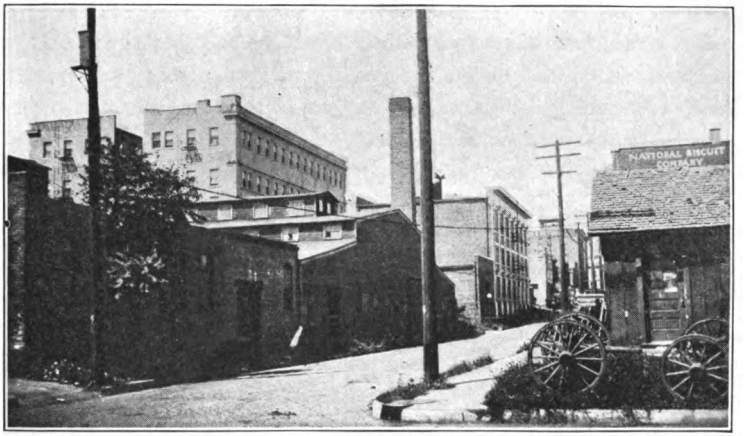
island, enjoys the best location. For that reason it yields economic rent. Superior urban sites, like agricultural lands above no-rent land, yield economic rent though the owners themselves utilize them. If the owner and the utilizer are different persons, the economic rent takes the form of contract rent. Otherwise it becomes a part of the utilizer's total income.

The unearned increment. — Closely associated with economic rent is what is commonly called the *unearned increment*, which means the added value given to land by society and not by landowners *as such*. For the sake of clearness we may confine our attention to urban sites, for it is there that social forces have had the greatest influence in raising land values.

Our discussion of urban rents has paved the way for the statement that retail-store sites are determined largely by the habits of the consuming public. One block is better than another for certain kinds of retailing. Just why it is better is a matter to be determined in every individual case: perhaps it is the location of the courthouse, or of the post office, or of a popular theater. Whatever the reasons — important as they are in actual business practices — we need only to remember that equal-sized business sites produce unequal amounts of economic rent, and that these inequalities rest largely on forces usually independent of the owners of the sites. Twenty years ago, to cite an example, an eastern capitalist acquired a vacant business lot in the city of Denver for $10,000. In the meantime his taxes and loss of interest on his investment totaled $17,000. Recently he sold the lot for $100,000, realizing over and above its entire cost to him the sum of $73,000. Not once in the twenty years did the capitalist visit Denver. Nor was it owing to any influence of his that the city grew, and that the people there acquired the habit of passing his vacant lot in great numbers. Yet without effort, and even without any show of foresight, for he had reluctantly taken the lot on an old debt,

DIFFERENT UTILIZATION OF SIMILAR PIECES OF LAND.
How did the erection of this hotel affect the value of adjacent sites?

he gained a small fortune. As one of his friends expressed it, he reaped where he did not sow. Single-taxers argue that all such increases in value should go to society and not to individuals. These arguments are best expressed by the single-taxers themselves in a well-known pamphlet entitled *A Single-*



NO MAN'S LAND.

In almost every city is to be found a fringe of sites around the business center undesirable either for stores or for residences.

Tax Catechism. The following three questions and answers indicate the nature of the catechism:

Q. What is meant by the Single Tax?

A. The payment of all public expenses from ground rent, the normal revenue, thus eventually abolishing all taxes.

Q. What is the ethical basis of the Single Tax?

A. The common right of all citizens to profit by site values of land which are a creation of the community.

Q. What is meant by the site value of land?

A. The market value of situation irrespective of improvements.

Any discussion of the unearned increment is incomplete without some mention of a contrary movement known as the *unearned decrement.* This concept can best be explained by reference to another concrete example. Several years ago a group of men built an apartment house in the city of Chicago on land then valued at $30,000. At that time the neighborhood was one of the best in the city. Shortly afterward several small store buildings were built near by. Then the elevated railroad was built down the middle of the street, and finally one of the large department stores built a warehouse on an adjoining lot. Desirable tenants could no longer be secured. The apartments were necessarily let to lower-income classes. The result was that the value of the ground declined from $30,000 to $15,000. Here was a loss inflicted on a small group of individuals by other individuals and by society at large. While no one believes that in the typical American city the decrement equals the increment, the fact must not be forgotten that a portion of the increment is offset by a decrement.

78. Economic Rent and Price

Economic rent does not enter into price. — The usual notion is that economic rent is one of the factors in setting price. This notion, however, is incorrect. Economic rent does not determine price; rather price is the chief factor in determining economic rent. It will be remembered that our island farmer who cultivated the best soil enjoyed a constantly increasing economic rent as the increasing demand for wheat forced the price upward. We assumed that his economic rent was twenty bushels of wheat per acre. Had his economic rent been thirty bushels instead of twenty it is not likely that the price of wheat would have been materially affected, for, as we have seen, the demand for wheat caused the price to be set at a point which would permit of the cultivation of the no-rent piece of land.

When contract rent equals economic rent — the two always *tend* to approximate — the former likewise does not enter into price. Hence the retail store utilizing the best site can sell as cheaply, all other things being equal, as its competitor on a poorer location. It is a well-known fact that one of the large variety-store companies will not locate in a city unless it can secure a relatively high-rent site. Similarly, the high contract rents paid by tenants on the rich soil of Iowa or Illinois do not affect the prices of their products.

Economic rent and agricultural values. — Those accustomed to buy and sell farm lands determine land values by fertility, location, and height of interest rate. Their first consideration is to ascertain the average yield of the piece of land they are trying to buy. Obviously, the more fertile the land the greater the yield. But this is not the only consideration. They must also estimate the cost of getting its product to market. An acre of corn land ten miles from an elevator, other things being equal, is less valuable than an acre nearer at hand. For in both cases the item of transportation cost must be taken into account. Finally, the value of a piece of land, or if we prefer, the value of its economic rent, depends also on the normal interest rate, for as the interest rate declines land values rise. Thus, a farm which would be considered to be worth $20,000 when the normal interest rate is 5 per cent, would be worth $25,000 if the interest rate should drop to 4 per cent. The methods employed to determine the value of a piece of unimproved land may be explained by the simple device as shown on page 340. First the economic rent is determined. Divide the rent by the normal rate of interest. The quotient is the value of the land.

Economic rent and urban values. — Compared with agricultural lands the process of determining the value of urban sites is usually a more difficult matter. Farm products are tangible, easily measured, and have a well-known market price.

Likewise the skill and ability ordinarily required to conduct farming operations are widely scattered among many persons. In the retail business, for example, the situation is different. The prospective buyer of a business site may feel safe in some cases in merely capitalizing the economic rent as represented

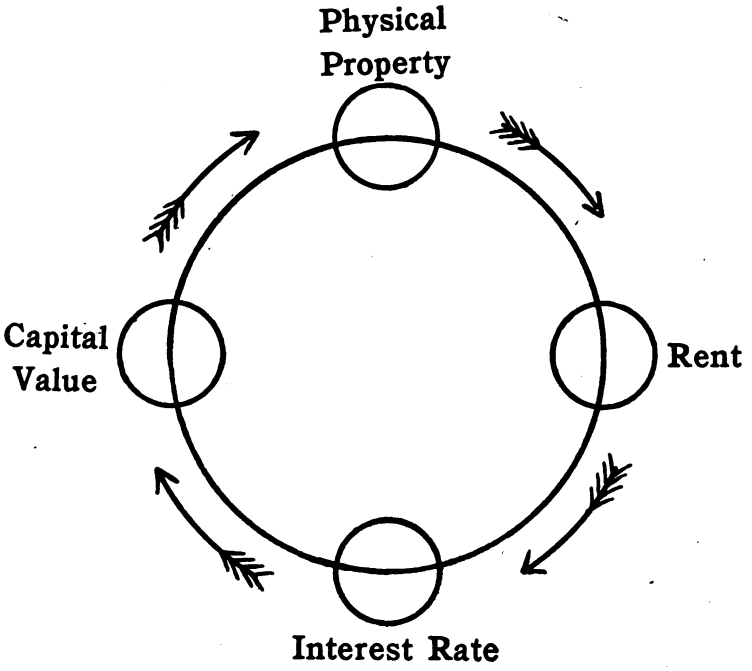


FIG. 10.

by the contract rent of the tenant. More often he would exercise greater care in arriving at the value of the site under consideration. In other words, even where a business site has enjoyed a uniform rent for years, the determination of its value is a "hazardous occupation."

Determination of the value of residence sites is still more difficult, for the utilities that flow from a home have an unsettled market price. The best step to take in trying to arrive at the value of such a site is to secure the opinion of a great many persons. Even if the site is improved and the prospective buyer expects to rent it, the opinion of disinterested parties is valuable, for after all it is to just such persons that he expects to rent the property. The market values of adjoining properties are also a fair guide, particularly if they are being utilized by tenants; for it is a safe assumption that the united judgments of many buyers and sellers are approximately correct. In any case, the ultimate value of the site must be determined by society, for the difference between this particular site and some other one is largely a social matter.

EXERCISES AND PROBLEMS

A

1. Distinguish between economic rent and commercial rent.
2. Why is one piece of farm land preferred to another piece?
3. What factors determine this preference?
4. What is no-rent land?
5. Just how can a farmer afford to operate no-rent land?
6. How does a change in the price of wheat affect the economic rent of wheat lands?
7. What effect has soil "butchery" on economic rent?
8. Just how does improved means of transportation affect economic rent?
9. How in general is economic rent affected by an increase in population?
10. How does custom and habit assist to determine the economic rent of store sites?
11. What other factors are important?
12. Explain what is meant by "unearned increment."
13. What is the relation between this increment and the single tax?
14. Distinguish clearly between an "increment" and a "decrement."

15. What is the relation between economic rent and price?
16. Why does economic rent not enter into price?
17. Just how does the interest rate affect land values?

B

1. Make a tour of inspection about your community.
   a. Notice the wide variations in the utilization of business sites.
   b. Do these business sites yield more or less than equal-sized sites in the residence districts?
   c. Notice the sites which form a *fringe* about the business section.
      i. How are they utilized?
      ii. What about the improvements found there?
      iii. Do they seem to be in a state of *transition?* Explain.
   d. Contrast the various residence sections.
      i. What factors cause some sites to yield more economic rent than others?
      ii. Just how do these factors differ?
   e. Notice the number and location of vacant sites.
      i. Why are these not utilized?
      ii. Are there evidences of owners trying to secure unearned increments?
   f. Widen your definition of "urban economic rent."
2. Suppose you were to become heir to a cultivated farm located in Patagonia. How would you determine its selling price?
3. Inquire among business men and others concerning some instance of unearned increment.
   a. Determine as accurately as possible the size of the increment (difference between buying price and selling price).
   b. Estimate the interest on the investment at a fair rate.
   c. Subtract from the interest any income that may have been received.
   d. What portion of the increment appears to have been *unearned?*
   e. Is this portion more or less than it seemed to be when you began your examination?
4. Find an example of "decrement" in your community.
   a. What influences caused this decrement?
   b. Have you heard any one propose that society should compensate the owner for his loss? Who?

5. If you were seeking a site for a cigar store, how would the location of the following influence you:

a. Other cigar stores?
b. Dry goods stores?
c. Restaurants?
d. Show houses?
e. Garages?
f. Hotels?
g. Soda fountains?
h. Drug stores?
i. Railway depots?

C

1. A prominent United States senator once made the public statement that the high prices of farm products then prevailing were caused by high rents.

a. Would you expect this statement to be criticized? Why?
b. What fixes the price of any farm product?
c. What is the relation between the prices of farm products and the economic rent of the land on which they are grown?

2. Why does the contract rent of a piece of land often differ widely from its economic rent?

3. How are the following likely to affect the economic rent of farm lands:

a. Improved machinery?
b. Discovery of new fertilizer?
c. Improved methods in farming?
d. Change in interest rate?
e. Automobiles?

4. A merchant located on the *fringe* of a business district often advertises that he can, owing to the low rent which he pays, sell goods cheaper than competing merchants nearer the business center.

a. Why is his rent lower than theirs?
b. Suppose he gets the business of his competitors.
i. How will the economic rent of his site be affected?
ii. How would this affect his contract rent?
iii. Would this claim of cheap rent continue to be valid? Explain.
c. Does his lower rent permit him to undersell his competitors?

5. Assuming that each piece of farm land yields its entire economic rent to its owner, why do tenants prefer one piece over another? Explain with some detail.

6. Sometimes a retail merchant advertises that he can afford to undersell his competitors because he happens to own the store site which he utilizes.

a. Does the land underneath his store building earn rent? Explain.

b. Suppose a competitor who does *not* own his store building should invest the value of his site in railroad bonds.

i. Would he be justified in advertising that he could undersell his competitors because he owned bonds?

ii. How would the buying public regard such an advertisement?

c. If he can afford to distribute his rent among his customers, why should he not also advertise that he can undersell his competitors because he owns his own capital or because his wife and children wait on his customers without pay?

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CHAPTER XXV

RETURN TO CAPITAL (INTEREST)

79. Interest Peculiar to Modern Industry

Attitude of the medieval church toward interest. — The church fathers of the Middle Ages looked on the taking of interest as a sin. In assuming this position they were influenced no doubt by the fact that most loans were consumption loans — that is, loans contracted for the purpose of acquiring consumable goods. They did not believe that money was productive. Consequently, they declared that a debt was fully discharged when the borrower returned all that he had borrowed. Because of the refusal of the church to countenance the taking of interest, the money-lending business, as was noticed in an earlier connection, naturally fell into the hands of the Jews and the Lombards. Here no doubt is one of the chief causes of the bitter feeling that existed between the Jews and their Christian neighbors. The latter, regarding all interest as usury, looked on the Jews with contempt. Shakespeare clearly recognized the two divergent viewpoints when he made Shylock say in the *Merchant of Venice :*

> "Signior Antonio, many a time and oft
> In the Rialto you have rated me
> About my moneys and my usances:"

To this Antonio, the merchant, answered:

> "If thou wilt lend this money, lend it not
> As to thy friends; for when did friendship take
> A breed of barren metal of his friend?
> But lend it rather to thine enemy,
> Who, if he break, thou mayst with better face
> Exact the penalties."

Rise of a money-lending class. — Despite the attitude of the medieval church many Christians loaned money. Especially widespread was the practice of moneyed men to evade the spirit of the law without violating its letter by becoming *silent* partners in trading enterprises. Gradually the attempt even to comply with the letter of the law was abandoned; one by one the nations withdrew their support from this particular canon law. Then the church reluctantly bowed its head to the force of expediency. From that time, accumulations of wealth have more and more sought outlets to investments. Now numerous groups give their entire time to bringing lenders and borrowers together. We have seen already how important in this respect are the various kinds of bankers. Only a little less so are note brokers, real estate loan agencies, building and loan associations, and lawyers.

So common is the phenomenon of borrowing and lending that scarcely one of us has ever given a thought of *why* interest can be paid, and *how much* the rate should be. Yet no subject in modern economics has created more discussion and debate. The ablest economists of the time have spent years on the *why* phase of interest, and have published monumental works to support their conclusions. This unsettled situation, however, need not deter us from glancing hastily at the question in its broadest aspects.

80. Why Interest Is Paid and How Much

The viewpoint of the borrower. — We have learned already that labor and land, when assisted by capital, produce more than when working alone. The best evidence of this fact is the tremendous volume of modern production compared with what we might expect to be produced if all capital were removed or if it had never existed. No one doubts that the sudden disappearance of capital from the face of the earth would in a

short time result in the starvation of half of the human race. The borrower, then, since he knows from experience and observation that he can afford to pay a premium for the use of capital, is willing, if necessary, to bid up to the point of his expected gain. The wide variety of business enterprises combine with the different expectations of enterprisers, to make these independent bids cover a wide range which we may illustrate as follows:

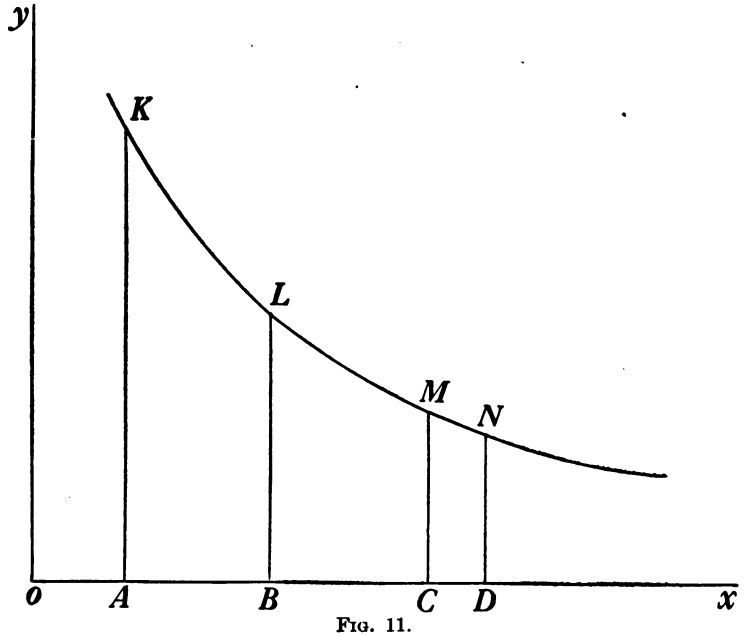

FIG. 11.

Borrower A is willing if necessary to go to AK (12 per cent); B, to BL (8 per cent); C, to CM (5 per cent); and D, to DN (4 per cent). It should be noticed that the borrowers' curve is a demand curve.

The viewpoint of the lender. — The lender also knows that capital is productive, but that in itself does not explain satisfactorily why he saves rather than spends his capital. Saving means abstinence for the ordinary individual, and, as we shall see, modern production bids for the savings of all regardless of wealth and income. Furthermore, it is a human characteristic

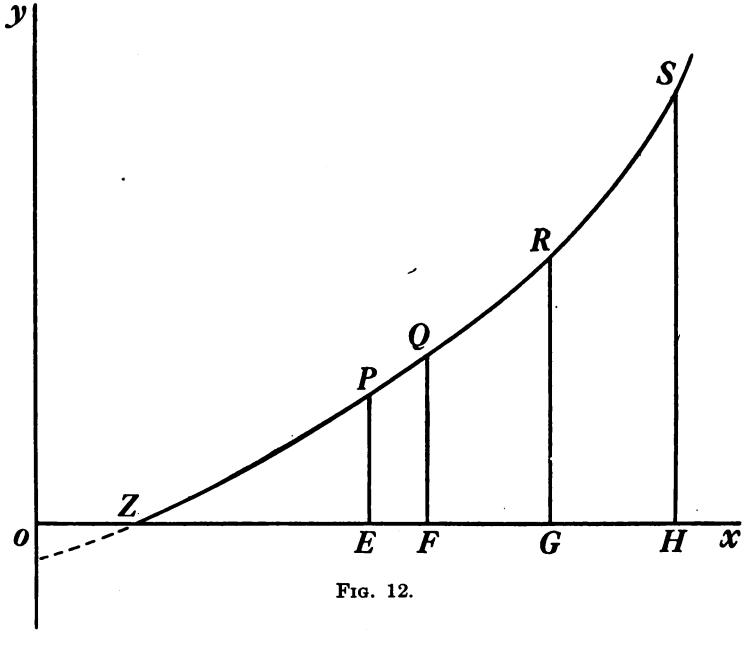

FIG. 12.

that the normal man prefers present goods to future goods — that is, present consumption to future consumption. This characteristic is most prominent among primitive peoples and among children. The American Indian seldom ever stored food for future consumption, though he was aware from experience that famine might be expected before the approaching winter

was over. Most boys and girls would rather eat their candy or cake today than to wait until tomorrow. Even older children often prefer to see a second-rate film today to a much better one next week. Even adults are not free from this form of impatience, though as a general rule it is less prominent among them. Since most of us value present goods more highly than future goods, it follows that some inducement must be held out to us to cause us to postpone consumption — that is, to exchange present goods for future goods. This inducement we call interest. It is the price for waiting. Different people set different prices on the pain of waiting. Some demand a very high reward, some a more moderate one, a few have no preference, while occasionally we are able to find an individual that actually prefers future to present goods. We may arrange the various savers in the manner as shown on opposite page.

Those to the left of Z will pay to be permitted to save, and those at Z will save without reward. As we move along the curve to the right of Z the price demanded for abstinence rises. E demands EP (4 per cent); F demands FQ (5 per cent); G demands GR (8 per cent); while H, who has the least desire to postpone consumption, demands HS (12 per cent).

Fixing the current interest rate. — We may now inquire how the current rate of interest is fixed. Since the borrowers are really buyers of capital and the lenders sellers of capital we can apply the principle developed in the chapter on determining the market price of goods. Like buyers of goods, borrowers have a maximum price (interest rate) in mind; and lenders, like sellers, consider only a minimum price (interest rate). Borrower A, to revert to Fig. 11, is willing to go as high as 12 per cent but no higher. Borrower B will go no higher than 8 per cent, while borrowers C and D have in mind a maximum rate of 5 and 4 per cent, respectively. Lender H must have at least 12 per cent; lender G, 8 per cent; lender F, 5 per cent; and lender

E, 4 per cent. Obviously, any one of the lenders would be willing to supply, to the extent of his lending capital, the wants of borrower A. But A, eager to pursue his own economic advantage, quickly sees, since he does not desire all the capital available, that some of the lenders have a minimum rate far below his maximum. Also those with lower minimum rates will not permit any one of their number to secure A's maximum rate at the expense of leaving their savings uninvested. Thus from the opposing forces there emerges an interest rate which will permit the largest amount of money to be loaned. This we call the current rate, and its location may be illustrated as follows:

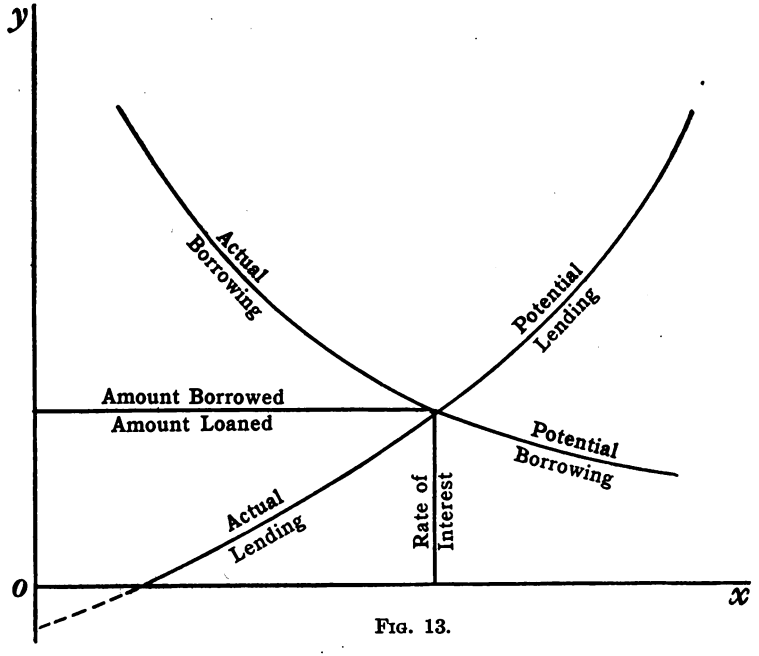

FIG. 13.

81. Variations in the Interest Rate

The risk element. — So far in our discussion of the interest question we have considered only *pure* interest, and the *current rate* of pure interest. We may now examine some of the forces that cause (1) the current rate of contract interest to be above the current rate of pure interest, and (2) variations in rates of contract interest. Risk is the chief cause for the difference between pure interest and contract interest. No debt, we may say, is *absolutely* sure to be paid, though in the case of United States bonds uncertainty is reduced to a minimum. Risk increases rate. Government obligations bear a relatively low rate of 3 or 4 per cent; railroad bonds, 5 per cent; ordinary bank paper (promissory notes), 6 or 7 per cent; while collateral loans made by pawn shops often bear a rate of 30 or 40 per cent. A portion of the interest income, therefore, represents risk.

Fixity of investment. — Some loans or investments are preferred to others even where there is the same element of risk involved. A railroad bond, for example, usually bears a lower rate of interest than a first-class farm mortgage. Here the risk element is very low, but bonds are much easier sold than are mortgages; hence the difference in rates. Banks also vary rates of interest paid on deposits according to the degree of fixity. City banks often pay 2 per cent on checking deposits and 3 per cent on savings. Depositors may withdraw the former on demand, while in the latter case the bank has the right to compel formal notice of several days. Likewise in lending money, banks usually charge less interest on a call loan than on a time loan. One they can have paid on demand; for the other they must wait until it is due. Thus we see that the lender who reserves the right to have his loan returned to him quickly must accept a less reward for his waiting than would be necessary if he were willing to forego this reservation. Also the borrower

is unwilling to pay as much premium for capital over which he has an uncertain control as he would pay if his control were made more certain.

Variations among industries. — It often happens that a certain industry is prosperous above the average. Usually, under these circumstances, enterprisers, eager to enlarge their business, pay a higher interest rate than is current at the time. Other enterprisers seeing the prosperity of this particular industry will quietly enter the field and bid high for capital. As a result there is some variation in the interest rates among different industries.

Variations among localities. — In a large country like the United States there is a wide variation in the interest rate. Even the states recognize this fact in their usury laws. Some restrict the legal rate of interest to 6 per cent, some to 7 per cent, while others permit as high a rate as 10 per cent. Three closely related causes account for this variation: (1) relative scarcity of capital, (2) cost of supervising loans, (3) lack of information on the part of lenders.

In the newer sections of the country, capital is scarce. Yet it is there that capital can usually be used to the best advantage in improving farms, in building cities, and in starting manufactures. Naturally, enterprisers bid high for the scanty stock. The question may very properly be raised, however: Why does not the capital of older sections flow to these regions of high interest rates? First of all, there is a greater degree of uncertainty connected with the industries here than would be the case if they were being carried on in the older settled regions. For that reason a lender hesitates to loan his funds, especially if he is not in a position to supervise them to the extent of protecting his own interests. The next best thing he can do is to send them to some bank or mortgage concern in the newly settled section with instructions to loan them to the best

advantage. Granted that the security offered is ample, yet there has been some cost in handling the funds, which will appear in the form of higher interest rates. Finally, the lender, unless he is in a particularly good position to get information, is likely to know little about either the borrower or the banker. Hence he prefers to loan his funds nearer home even at a lower rate.

EXERCISES AND PROBLEMS

A

1. Just why did the medieval church oppose the taking of interest?
2. What is the difference between a consumption loan and a production loan?
3. In the conversation between Shylock and the merchant Antonio, what is the significance of the following expressions: "usances"? "barren metal"? "exact the penalties"?
4. Just how was a silent partner able to loan money without evading the law?
5. What are the two aspects of interest?
6. Why will borrowers pay interest on loans?
7. Why must lenders be rewarded?
8. What determines the maximum interest rate a borrower will pay?
9. What is the lowest interest rate which a lender will accept?
10. Just why are present goods usually valued more highly than future goods?
11. Is saving painful? Explain.
12. Why should the legal interest rate be higher in Wyoming than in Massachusetts?
13. What is a "call loan"?
14. Why do lenders prefer a call loan to a time loan?
15. Why is the interest rate on bonds usually lower than the dividends on stocks of the same concern?
16. Why is a railroad bond more negotiable than a farm mortgage?
17. What kind of real estate mortgages resemble bonds?
18. Where is the best market for real estate mortgages usually found?
19. Why are real estate mortgages usually recorded?

B

1. Put the following questions to some friendly business man: "Why are you willing to pay interest on borrowed money?" "Would you be willing, rather than to do without, to pay a higher rate than you now pay?" "How would an increase in the current interest rate be likely to affect your business?"

2. Examine any metropolitan newspaper for quotations on New York interest rates.

   a. Name the various kinds of loans found.

   b. Which bears the higher interest rate?

   c. Consult some banker regarding the New York interest rate.

      i. Inquire about the nature of a demand loan.

      ii. Ask him to explain why the rate on commercial loans varies but slightly.

   d. Compare these quotations with quotations found in older newspapers.

3. Call to mind instances when present goods commanded a very high premium over future goods; when future goods were more greatly desired than present goods.

4. Name five forms of investment with which you are familiar.

   a. Which bears the highest interest rate? the lowest?

   b. To what extent does risk cause the difference?

5. Inquire of some banker concerning the opportunities of banks in the older states to loan money in the newer regions.

C

1. Aristotle spoke of money as being barren, and hence incapable of producing interest.

   a. Do enterprisers borrow money, or is it, in the long run, equipment for producing goods?

   b. What assurance has an enterpriser that his borrowed equipment will reproduce itself and something over in the way of interest?

2. Suppose it should become generally known that excessive profits are being made in the manufacture of shoes.

   a. How would this knowledge affect enterprisers in other lines?

   b. What would be the effect on the production of shoes?

   c. Would the prices of shoes rise or fall? Why?

d. How would this change affect the profits of shoe-manufacturers?

3. Discuss the desirability of a state legislature fixing a legal rate of interest above which the law provides a penalty for going.

4. As a result of an insistent demand the government established in 1916 a farm loan bank which furnishes farmers money at a moderate rate of interest.

a. From which sections of the country would you expect the demand to have been the strongest? Why?

b. How did the bankers regard this new bank?

c. Has it succeeded to an extent in equalizing the interest rate over the whole country?

5. The "sacrifice" theory of interest is often criticized on the ground that such men as Rockefeller and Morgan make no sacrifices in abstaining from consuming their wealth.

a. Can wealthy men like these save all the capital needed?

b. Which savers exert the greatest influence in fixing the interest rate?

c. Do these savers sacrifice? Explain.

SUPPLEMENTARY READING

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CHAPTER XXVI

RETURN TO THE BUSINESS MAN (COMPETITIVE PROFITS)

82. Place of the Business Man in Industry

The business man combines the factors of production. — Hitherto we have discussed the place of land, labor, and capital in production, and the share of distribution going to each, as if these factors were guided in their work by internal forces. Both land and capital are stone blind. Workers, too, need direction. Some one must anticipate probable demands, determine the relative amount of each factor to employ in production, and provide for supplies of raw materials. In other words, there is a productive function apart from land, labor, and capital. Consequently, there has developed in modern industrial society a group of men who devote their time and abilities to performing this function. Such men we call *enterprisers*. Every business man, in fact, no matter how large or how small his operation, is necessarily an enterpriser.

Responsibility of the business man. — Since it is the function of the enterpriser to combine land, labor, and capital in such a way as to make them productive, it naturally follows that he must assume all of the risks involved in his undertaking. Modern practices require him to enter into binding contracts for the factors of production before he has prepared a single unit of his goods for the market. One about to undertake the manufacture of cloth, for example, must rent or purchase a

site for his plant, must construct factory buildings, and finally he must agree with cloth-weavers to pay them certain wages. The farmer has similar experiences. He buys or rents land, prepares the soil for seeding, plants, and cultivates. He may or he may not reap crops sufficiently valuable to pay for the costs involved. Whether or not he does, is no concern of land, labor, and capital; that is, each of these factors is protected by a binding contract with the enterpriser. Every enterpriser must take these risks; otherwise enterprisers would not be enterprisers. The importance of risk-taking is overlooked by many, who, blinded by the brilliant successes of some enterprisers, assume or pretend to assume that the typical business man's reward in the form of profits is always unjustified. Herein lies the weakness of any system that would eliminate the enterpriser from industry.

Characteristics of the business man. —The business man of this country possesses certain characteristics which we may examine at this point. First of all, the typical American enterpriser is daring; so daring in fact, that foreign observers have said that he would be willing, if necessary, to pay to be allowed to assume business risks. Overdrawn as this statement is, it points to a significant tendency. Not only is he daring, but he is resourceful. Like a good soldier he watches every movement of those opposed to him, takes advantage of every opportunity, and uses his own forces to the best advantage. In short, he often accomplishes the impossible. Moreover, the typical American enterpriser is imaginative. Particularly among our captains of industry do we find this characteristic well developed. On no other ground can we explain the numerous transcontinental railroads, the irrigation projects of the Southwest, the great steel mills at Gary, Indiana, and Bethlehem, Pennsylvania, and the Panama Canal. Such projects do not result from accident; they must mature in the mind before they

become realities. James J. Hill owed much of his success as a master railroad-builder to a highly developed imaginative ability. In a more modest way the pioneer farmers of the West and Middle West saw in the future the long stretches of timber land and the trackless prairies give way to prosperous farming communities. They not only saw, but they also dared to make the "great venture," to pit their resourcefulness against the hostility of an unsettled country.

Source of the business man's characteristics. — Enterprisers, in common with all other members of the human race, get their business characteristics from two sources: (1) heredity, (2) education. Some are especially endowed by nature; some acquire success as enterprisers, by long hours of study and application; a few combine both characteristics to a high degree. It is safe to say, however, that the typical business man — farmer, merchant, manufacturer — is fairly well born and fairly well trained; that is, he can attribute his economic success partly to his ancestors and partly to his own efforts. What he lacks in heredity he may usually make up in education. Which of these two forces is the more important? At the risk of starting a fruitless discussion we may say with some assurance that heredity asserts itself especially strong during the earlier years of business, while education and training (experience) necessarily exert themselves at a later date. The importance of the sources of business characteristics becomes significant when we try to account for the place of the enterpriser in industry. We know what he does, but we must also know why society rewards him for his services. If he is created of finer clay than most men, then, so far as his share in distribution is concerned, he resembles land. If he succeeds by study and training then he resembles labor. In either case, his reward is a differential — that is, it depends on his superiority over the margin.

83. The Nature and Source of Profits

Profits are residual. — With the place of the business man established in modern industry, we may now turn to the nature and source of the distributive share which goes to him for his services.

The enterpriser, we have seen, enters into a contract to pay definite amounts to land, labor, and capital for assisting him in his enterprise. Eventually, when the product is sold, the enterpriser is in a position for the first time to strike a balance between what he has paid out and what he has received. If the latter exceeds the former we say that he has made a *profit*. Otherwise, unless the two items are exactly the same, which is unlikely, we say that he has made a *negative profit* — that is, suffered a *loss*. Obviously, then, profits are residual. They are what is left over after all other shares in distribution have been paid. They stand exposed to every fluctuation in the size of the payments for raw materials and to the three factors of production.

Guarding against price fluctuation. — In the last sentence above we have the key to the source of profits. Price fluctuations — in wages, interest, rent, raw materials, and finished products — are at the bottom of all profits or losses. If the prices of everything entering into the product of any particular enterprise were absolutely fixed, and the price of the finished product itself known in advance, there would be little room for profits. Usually there is no way to guard against price fluctuation, and it is not certain that enterprisers in general would welcome any change that might threaten the existence of their profits. Often a house-builder, when he agrees to erect a structure at a certain price, protects himself by contracting at the same time for the building material to be used in its construction. Clothing manufacturers, also, when they sell men's

suits for future delivery often base their prices on a previously arranged price for cloth.

The highest development in this respect has been in the flour industry. To protect themselves from possible loss, millers usually are willing to forego possible gains by buying wheat for

Courtesy of Mr. Leslie F. Gates, Chicago.

SCENE ON THE CHICAGO BOARD OF TRADE.

future delivery. We can best understand how this is done if we consider a concrete case. Miller A is asked in December to make a price on flour to be delivered in June. Not wishing to take chances he looks up the quotation of May wheat and finds, let us say, that it is $1.00 per bushel. With this information he can as easily fix the price of flour to be delivered in June as he could if he were selling out of his present supply. Miller A

then buys on the Board of Trade at $1.00 a bushel enough May wheat to fill his flour contract. Let us suppose that when the time for the delivery of the wheat has arrived (May) the market price is 99 cents a bushel instead of $1.00. Miller A can compel delivery at the contract price, which is $1.00. Or he can, if it is possible, buy his wheat in the local market at 99 cents and sell out his Board of Trade contract at one cent per bushel loss. Suppose, however, that the market price in May was $1.01 instead of 99 cents. In that case he could compel delivery of wheat at $1.00 a bushel, or go into the local market and buy it at $1.01, selling out his Board of Trade contract at one cent per bushel profit. The important thing to notice is that our miller has protected himself from fluctuation in the price of wheat, preferring security to possible profit. In any case his wheat costs him $1.00 a bushel irrespective of the market price. This illustration is stripped of the numerous complications which arise in such transactions, but it contains in essence the principle of what we may call *industrial insurance* — that is, insurance against loss by price fluctuation.

Competitive profits resemble rent. — There is one striking similarity between profits and rent. Rent, as we have seen, is a differential; that is, it arises from differences in fertility or location. Profits likewise owe their existence to differences. The best enterpriser, like the best farm land, produces abundantly; and like the best farm land he cannot produce enough for all. Consequently, society is compelled to resort to poorer enterprisers just as it is to poorer lands. But the costs of production of poorer enterprisers are higher than for better enterprisers in the same industry, and they must get a return equal to what they have paid for the use of land, labor, and capital, in addition to their own wages. In other words, the poorest enterpriser in any industry tends to set the price of its product, while all other enterprisers in the same industry enjoy

a reward, called profits, for their superior skill. As a result, profits, like rent, do not enter into price. Price fixes profits; profits do not fix price. Figure 14 illustrates this point. Society demands the services of four enterprisers, A, B, C, and D, in a certain industry. A's cost of producing one unit of the product

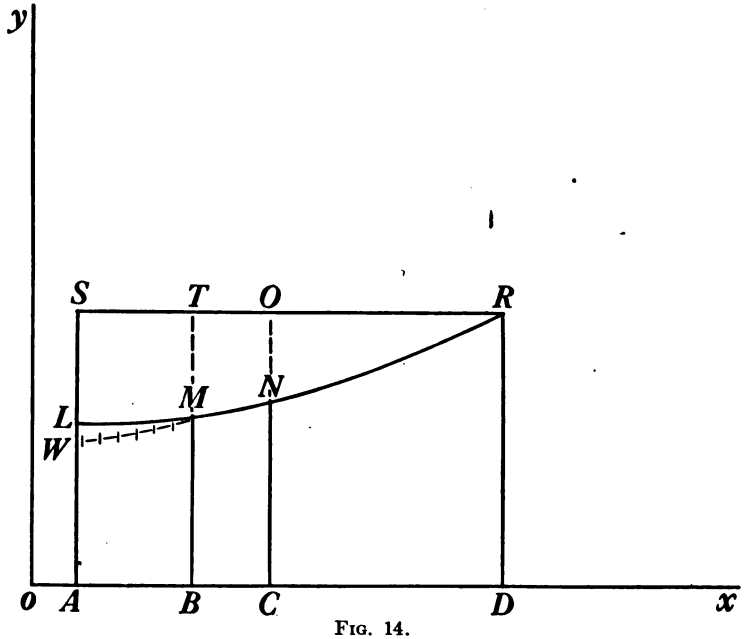

FIG. 14.

is AL; B's cost is BM; C's cost is CN; and D's cost is DR. Clearly, the market price cannot be less than DR. Consequently, on each unit A will enjoy a profit of LS; B, of MT; and C, of NO. If A's profit were WS instead of LS the price of the product would not be materially affected, for the price DR is still necessary to keep D in business.

Competitive profits tend to disappear. — The fact that A, B, and C, in the illustration above, enjoy profits, will cause them to enlarge their operations in order to increase their profits by increasing their output. The demand for this particular product can ordinarily be increased only by lowering the price. But a lower price means less profit per unit. D, let us say, will be driven from business and C will become the *marginal producer*. Obviously, the unit profits of all will fall and it is likely that both A and B as well as C will suffer a decline in total profits. As competition increases, prices will continue to fall until, we are safe in saying, profits will tend to disappear. To put the same thought in different language, *competitive profits are always in the process of extinction*. This tendency is the basis for the trite saying, " Competition is the life of trade."

84. Coöperation and Profits

General attitude toward profits. — Most of us regard profits as something entirely different from rent, wages, or interest. When a friendly manufacturer says that he will sell us one of his products at cost we assume at once, and correctly so, that he has in mind merely to forego his profits. Why should he not also share with us a portion of his income arising from his land or capital? One is just as legitimately his as the other. In any case his total income is decreased by just so much. We would not expect a laborer to donate us an hour's work; nor a capitalist, the use of a hundred dollars for a month's time; nor a landowner, the use of a piece of his land. Why then are we not surprised when some one offers to make a gift of his profits? The difference lies no doubt in the fact that profits are not salable, that the sacrifice made to get them is not so noticeable, and that they are residual. Whatever the reason for its existence, the general notion prevails that profits can be eliminated easier than rent, wages, or interest.

Coöperation aims to eliminate profits. — The most ambitious attempts to eliminate profits have taken the form of coöperation. Everywhere groups are planning how to carry on this or that kind of industry without the assistance of professional enterprisers. Farmers organize coöperative grain elevators, creameries, and threshing "rings"; merchants combine to purchase goods in larger quantities; while consumers pool their buying ability in order to deal directly with jobbers, wholesalers, or manufacturers. Does the elimination of the professional enterpriser eliminate profits? If the farmers of a certain community can *manage* a grain elevator so successfully as to show a residual element at the end of the year, they have earned a profit. Perhaps it is returned to them the next year in the form of increased price or of decreased storage charges, yet that does not alter the fact (1) that it is profits, and (2) that it arose as a result of their skill as enterprisers. They have eliminated the enterpriser without eliminating his reward. In other words, our group of farmers has assumed the risks of the business and is entitled to any residual element that may arise.

Basis of successful coöperation. — Since competition tends to eliminate profits, and since the profits of any particular enterpriser are likely to come from a relatively large number of individuals, the saving to any one individual by the elimination of the enterpriser is usually small. As a consequence, cooperation is ordinarily possible only by people who are willing to exert themselves in order to effect petty savings. Generations of self-denial have accustomed the working classes of England to give careful attention to their purchases of food and clothing. In this country, on the contrary, we have always looked on petty savings as something akin to parsimony, and hence to be carefully avoided. Here we have the reason for their general failure in this country. The typical American

housewife, even among the ranks of unskilled labor, has not yet learned the difference between nine cents and ten cents, though this difference if spread out over the average family expenditures of this group for a year would aggregate forty or fifty dollars. Coöperation is also likely to be hampered in those localities or countries in which enterprisers are especially skilled. The European retailer is compelled to get excessive profits to cover losses caused by his slow-paying customers of the upper classes. Here such compulsion is neither necessary nor justifiable; merchants do not strive for certain customers, as they are likely to do in Europe, in order to gain respectability. Occasionally coöperation is undertaken to break a monopolistic hold on some industry. Fruit-growers, for example, have found it necessary in some sections of the country to market their own products in order to keep from being literally robbed.

Success of coöperation in various industries. — Coöperation is, by its very nature, more successful in some industries than in others. Retailing appears to offer the best opportunity: a relatively small amount of capital is required; no great amount of enterprising skill is necessary; and those interested come in contact with it daily. Coöperative manufacturing, however, is a more serious matter. Here must be settled important questions, such as the hiring of labor, changing the character of the product, and seeking new markets. To answer these questions successfully the hired manager must have such skill and ability as to attract the attention of competing manufacturers, who would either get him away or force the coöperative concern to raise his wages to a point where profits would be endangered. Moreover, the risks involved in retailing are comparatively small, so that the members of the association can very well afford to carry them. The largest of the English retail coöperative societies — the Rochdale Stores — has not attempted to establish its manufacturing business on a

coöperative basis, largely because of the impracticability of the scheme.

EXERCISES AND PROBLEMS

A

1. Why are profits a share in distribution?
2. What is the chief function of the enterpriser?
3. Just why are profits residual?
4. Characterize the typical American enterpriser.
5. Why in the successful conduct of a business is imagination as important as skill?
6. In what way does enterprising skill resemble land? labor?
7. Should enterprisers be guaranteed a profit by society? Explain.
8. What is the source of profits?
9. How may an enterpriser protect himself against risk?
10. How does this protection affect profits and losses?
11. In what way do profits resemble rent?
12. What is the relation between profits and prices?
13. Why do competitive profits tend to disappear?
14. How are profits related to coöperative schemes?
15. Why has coöperation usually failed in the United States?

B

1. Many business men, farmers in particular, call their entire net income profits. Interview some retail merchant that owns his own store building.
   a. How much does he set aside each year as rent?
   b. What amount of interest does his capital earn?
   c. What portion of his income does he attribute to his own wages?
   d. What is the government's share in the way of taxation?
2. Call to mind a successful enterpriser in your community.
   a. What are his most outstanding business characteristics?
   b. Does he give attention to details?
3. Question a retail merchant concerning advertised sales in which goods are offered at cost.
   a. What does he understand by "cost" in this connection?
   b. Does he always use the word "cost" in exactly the same way?
   c. What variety of meanings may the word have?
   d. Analyze your own notion of its meaning.

4. Examine, if possible, any attempts that have been made in your community to eliminate profits through coöperation.

a. What was the nature of these attempts?

b. Did any one oppose them? Who?

c. How well did they succeed?

C

1. Explain in each case why the following are, or are not, enterprisers:

a. Farmers.
b. Bankers.
c. Scissors-grinders.
d. Gamblers.
e. Professional beggars.
f. Railroad engineers.
g. Factory managers.
h. Taxi-drivers.

2. Give reasons why American enterprisers should be more daring than their European competitors.

3. Explain just how the profits of a cotton-cloth manufacturer may be affected by the following:

a. New inventions and discoveries in spinning, weaving, dyeing.
b. Increase or decrease in the ravages of the boll weevil.
c. Changes in style of clothing.
d. Production of wool, flax, and silk.
e. Changes in the current rate of wages for farm labor, railroad men, weavers.
f. Changes in the current interest rate.

4. Recently a convention composed of wheat-growers declared that the low price of wheat then prevailing was caused by speculation on the Chicago Board of Trade. On the same day a body of millers assembled in a near-by city made the claim that speculation in wheat caused wheat prices to be too high. Discuss.

5. Sometimes a miller is found who refuses to have any dealings with a wheat exchange on the ground that to do so would be speculation.

a. Can a miller trade in wheat without speculating? How?
b. Can a miller who sells flour for future delivery avoid speculation if he refuses to buy wheat for delivery at the same time? Explain.
c. Are millers more than other people likely to become wheat speculators?

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CHAPTER XXVII

SOCIALISM

85. Nature and Purposes of Socialism

What is socialism? — The spread of socialism throughout the world during the past generation, with its doctrines and claims so out of harmony with the established order of things, is the most striking social phenomenon of the time. Socialism is claiming the attention of many of the most thoughtful people, though giving their attention to the movement does not imply that they are giving it their support. They believe, however, that sooner or later the socialistic question must be decided one way or another; and for that reason they, as members of society, desire to act as intelligently as possible when that time comes. As students of economic questions we too should learn something about the demands of socialism, its program of action, the arguments of its supporters, and finally about the social conditions out of which it has grown.

Socialism, in brief, is a program which calls for the socialization of the instruments of production; that is, a program which demands that the state alone shall own the instruments of production. Under socialism there would be no professional enterprisers and no capitalists. *Some* socialists would also abolish private property in land, though this doctrine is not now universally held. Since there are to be neither enterprisers nor capitalists, it naturally follows that under socialism the shares that now emerge in the form of profits and interest would go to the workers in the form of increased wages. For that

reason socialism is best treated as a problem of distribution, though by its very nature the first changes in a state passing to socialism would be made in production. We must exercise care in this connection to rid our minds of the common fallacy that socialism means a redistribution of property so that all the members of society may have exactly the same amount of wealth. Unfortunately, some of the more radical socialists themselves have created this wrong impression by their intemperate assertions.

The abolition of profits and interest, and perhaps of rent, does not imply that all of the members of a socialistic state are to be equally wealthy. It merely means that there will be no opportunity for investment, and no opportunity to serve as a private enterpriser. Wealth may be accumulated and inherited, and enterprising skill may be utilized by the state and rewarded accordingly. Under socialism no great leisure class will be possible; that is, every one will labor. Tasks will be apportioned according to strength and ability and rewarded according to need. Socialists lay the blame for our industrial ills, such as unemployment and crises, to the present system of industry. They insist that in a socialist state everybody will be employed; and that production will be nicely adjusted to need.

Basis of socialism. — The socialists themselves claim that the system of private industry has broken down; that labor is being exploited to pay profits and interest; and that there is no prospect of better things unless the state goes over to socialism. The most bitter opponents of socialism dare not contend that all of its friends are *crazy* or even *cranks*. There must be, then, some basis for the socialistic movement which we see on every side. There is no denying, as we have seen in a previous chapter, that inequalities of income and wealth are glaring. Just why one man should be able to amass a fortune of a half billion dollars while millions are propertyless cannot be ex-

plained on the ground either of foresight or of thrift. Is it any wonder, then, that men of all walks of life are giving careful attention to every proposal that has for its end a more healthy condition of industrial society?

Different socialistic programs. — As is to be expected, different men have arrived at different conclusions regarding the socialistic program which the state ought to undertake. We may in this connection notice four different groups of socialists: (1) Utopian socialists, (2) Fabian socialists, (3) Christian socialists, and (4) Marxian socialists.

The first of these groups, called the Utopists, was confined to France, England, and the United States. Among its member were included two Frenchmen, Saint-Simon and Charles Fourier. One of the most prominent Englishmen in this group was Robert Owen, founder of a communistic settlement at New Harmony, Indiana. In this country one of the best-known disciples of Fourier was Horace Greeley, editor of the New York *Tribune*. These men had high ideals, and they made painful sacrifices in an effort to change them into actualities. The Fabian socialists are Englishmen. They believe that socialism will come when the people are once awake to its merits. To hasten this day the Fabian society of England offers prizes for essays and other papers dealing with socialism, which they print for general distribution. The group of Christian socialists lay great stress on the necessity of society following the doctrines of the early Christians, who, they contend, shared their possessions in common. One of the outstanding figures of the group was Charles Kingsley, a noted English preacher and the author of *Westward Ho!* and *Hypatia*.

More important for our discussion are the Marxian socialists. The chief figure of this group was Karl Marx (b. 1818; d. 1883), whose monumental work, entitled *Capital* (*Das Kapital*), is aptly called the bible of modern socialism. In this work one

DECLARATION OF KARL MARX AND HIS FRIENDS, 1848.

THE COMMUNIST MANIFESTO.

CHAPTER I.

BOURGEOISIE AND PROLETARIAT.

THE history of society in the past is the history of class struggles. Freemen and slaves, patricians and plebians, nobles and serfs, guild members and journeymen—in short, oppressors and oppressed, have always stood in direct opposition to each other. The struggle between them has sometimes been open, sometimes concealed, but always continuous. A never ceasing struggle, which has invariably ended, either in a revolutionary alteration of the social system, or in the common destruction of the contending classes.

In earlier historical epochs we find almost everywhere a minute division of society into classes or castes—a variety of grades in social life. In Ancient Rome we find patricians, knights, plebians, slaves; in Medieval Europe, feudal lords, vassals, burghers, journeymen, serfs; and in each of these classes here were again grades and distinctions.

Modern bourgeois society which arose from the ruins of the feudal system has not wiped out the antagonism of classes. New classes, new conditions of oppression, new modes and forms of carrying on the struggle, have been substituted for the old ones. The charateristic of our epoch—the epoch of the bourgeoisie, or middle class—is that the struggle between the various social classes has been reduced to its simplest form. Society tends more and more to be divided into two great hostile classes—the Bourgeoisie and the Proletariat.

From the serfs of the middle ages sprang the burgesses of the early Communes; and from this municipal class were developed the first elements of the Bourgeoisie. The discovery of America, the circumnavigation of Africa, gave the bourgeoisie or middle class—then coming into being—new and wider fields of action. The colonization of America, the opening up of the East Indian and Chinese markets, the colonial trade, the increase

may find the claims of socialism ably set forth and ably defended. Two of them we may properly examine at this point. (1) Marx insisted that laborers produced much more than they received in the form of wages. This excess he called *surplus value.* What he really meant was that the two shares in distribution, profits and interest, were really portions of wages withheld from labor. (2) Marx also held the view that the interests of capital and labor could never be reconciled. Hence he speaks of the "inevitable conflict" between these two factors in production. He believed, and his followers hold the same view, that it is only a question of time until the laborers of the world would be compelled to crush capitalism. Hence, they are inclined to oppose any schemes that have for their end the reconciliation of capital and labor. Here we have the reason for the inability of socialism and organized labor to agree. Organized labor recognizes the mportance of the employer in industry. Moreover, its efforts are directed to the betterment of the working classes, and hence, a postponement of the "inevitable conflict."

Socialism in operation. — The usual argument advanced against any proposal for the government regulation of industry is that it is socialistic. Every legislative act of Congress which has had for its end government interference in enterprise has been bitterly attacked on this ground. Yet strange as it may appear, what is socialistic in one generation is likely to become a settled and widely accepted policy in the next. When the national government decided in 1887 to regulate interstate commerce, many well-meaning persons thought they saw the beginning of a socialistic state. Forty years of practice have produced a change. No longer is there any opposition to the principle embodied in regulating railroads. This, however, is but a single illustration; it might be duplicated almost indefinitely. From Congress, the state legislature, and city

councils there issues forth a constant stream of so-called socialistic legislation; that is, legislation which gives society more complete control over the factors of production. The longest step in this direction, taken to be sure as a war measure, occurred in December, 1917, when President Wilson, acting under authority conferred on him by Congress, took charge of the railroads of the country. Whatever our notions about socialism may be, whether we favor its doctrines or oppose them, we cannot shut our eyes to the fact that society is more and more intervening in the affairs of private industry.

86. Criticisms of the Socialistic Program

Character of human motives. — Criticism of the socialistic program may be made on several different grounds. Even those who are inclined to be friendly toward the views of socialism feel that socialistic leaders have minimized the importance of the motives which cause the normal individual to exert himself economically. Here no doubt is a source of weakness, for socialists seem to take too much for granted. They see modern industrial society as it is now constituted with its various groups of workers, its enterprisers, and its capitalists. They see large income streams flowing into the pockets of the last two groups. Perhaps they see also the skill of the enterprisers and the sacrifice of the savers of capital. Back of all of the labor, the skill, and the sacrifice is the desire to possess goods. If socialism meant nothing more than a socialization of production, little objection could be urged against it by those who sympathize with its aims. May it not mean more than merely a socialization? May it not also mean the destruction of the force that drives men to their best endeavors, not only enterprisers but laborers? May it not ultimately undermine the very industrial structure which modern society has erected? These are pertinent questions which demand attention and

even serious consideration; for the first step in socialism, if it be decided to give it a trial, may be to reshape human nature — that is, to destroy individual selfishness.

The institution of private property. — A second obstacle to the socialistic goal is the institution of private property. For

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SOLDIERS AND SAILORS BREAKING UP A SOCIALIST MEETING (IN BOSTON, MASS.).

centuries individuals the world over have been accustomed to hold various forms of property to the exclusion of all the rest of mankind. Each one speaks of *his* land, *his* money, or *his*

goods. No other race of people has held so stubbornly to this principle as have the English, who insist that a man's house is his castle. For the individual to give up his property rights to society is beyond the conception of the ordinary man. It is doubtful if more than a scant few, all avowed socialists, would subscribe to such a principle. The assumption might be drawn from what has just been said that socialism is opposed on the ground that practically every one in this country owns property which a socialistic state would take over. Such, however, is not the case, for in so far as land is concerned more than one-half of the people of the United States are propertyless. Why, then, we may ask, do not those who would profit under socialism immediately vote to adopt the system? The answer is easily given when once we really understand human nature. First, the great bulk of men have never questioned, even in their own minds, the sanctity of private property rights. Second, the typical propertyless individual hopes some day to possess property of his own. Here, as in the case of economic motives, considerable education will be needed before any thorough-going socialistic program can be carried out. A broad education it must be, which will emphasize the superior needs of society, the subordination of individual rights to social rights, and the spiritual admonition that it is more blessed to give than to receive.

Difficulties of administration. — Assuming that a state has advanced to the point where its members are willing to exert themselves just as efficiently as they do now and to give up portions, at least, of their private property to the state, there would still remain serious administrative problems. Capital would be just as necessary under the new condition as under the old. Enterprising skill could not be dispensed with. Some one would have to make decisions as to amount and character of output, and to methods of distribution. What

particular goods shall be produced? in what quantity? how much shall be paid to each workman? how much shall the enterpriser get? The number of questions of this character which we might raise is limitless. The mere fact, however, that socialists cannot answer any one or all of such questions does not necessarily condemn the socialistic program. Every new program must face the same difficulty. It is doubtful, for example, if Jefferson, or Franklin, or any other one of the men who drew up the Constitution of the United States in 1787, could have answered one-tenth of the questions which have since confronted the national government. Simply because we cannot see how each detail is to be carried out in a socialistic state, is not sufficient ground on which to reject socialism. Our final judgment must be based on more evidence.

87. Some Substitutions for Socialism

Government regulation. — Earlier in the chapter mention was made of the fact that society in this country has undertaken a variety of industrial activities which show unmistakable tendencies toward the socialistic program. Socialists themselves say that these undertakings are mere substitutes for socialism, if not indeed flimsy makeshifts.

The most outstanding substitute of this nature is government regulation. We have already seen how Congress has provided, in the Interstate Commerce Act and its amendments, for regulating trade among the states. But the national government has gone much farther in this respect. We have anti-trust laws, child-labor laws, pure-food laws, drug laws, laws regulating the inspection of meat products, government manufactures of war materials, and public shipyards. Our participation in the Great War compelled unheard-of regulative measures in production. Raw materials were apportioned among manufactures, the country experienced " coalless " days, while even

consumers were told what they might eat. Since government regulation seems to be the first step toward government ownership and government operation, all such regulative measures are regarded by many with grave apprehension.

Government coöperation. — The government has also cooperated in some industries. The most familiar example in this respect is the ship subsidy, whereby the government for a nominal economic service pays to shipowners stated sums of money in order to encourage shipbuilding and ship operations. Irrigation is another example. Here the government builds storage basins from which it supplies water to farmers in the near-by regions. In other words, the government coöperates in production. Obviously, grave dangers lurk in government coöperation, for to open the government purse to the hands of private individuals on the pretense of public welfare, is a temptation sometimes difficult to resist.

The problem of government operation. — Our government has had too little experience in the operation of industry, to permit of any judgment being formed as to the merits of government ownership. We have conducted the post office with a fair degree of efficiency, and, much to the surprise of many people, the national government dug the Panama Canal at an enormous cost free from suspicion of graft or political jobbery. Could we hope to carry on other industries with the same measure of success? Some say, Yes; others, No. Neither side has much data on which to base conclusions. Those who answer yes, point to the success of the post office as an evidence of government efficiency. Those who answer no, lay stress on the temptation of public officials to be careless with public affairs. They direct attention to the "pork-barrel" practices of making appropriations for public improvements, and from this fact they conclude that industry in general would be in grave danger if directed by the government. Government operation is likely to become

increasingly important as a social problem, and for that reason it is our duty to give careful attention to its solution.

EXERCISES AND PROBLEMS

A

1. Why may socialism be considered a distributive problem?
2. May it be also a productive problem? Explain.
3. Why should every one carefully examine the claims of socialism?
4. Account for the hazy notions many people have concerning socialism.
5. Do socialists look forward to an equal distribution of wealth? of income?
6. What essential beliefs divide socialists into groups?
7. Just what did Marx mean by the expression, "surplus value"?
8. Do socialists urge friendly relations between employer and employee? Why, or why not?
9. What human motives hinder socialism?
10. What is meant by the expression, "the institution of private property"?
11. What administrative problems would confront a socialistic state?
12. What important present-day questions of production would persist under socialism?
13. Why, or why not, may we justly demand that the solution of every administrative problem be pointed out before we give a respectful hearing to the principles of socialism?
14. What is a substitute for socialism?

B

1. Consult with some well-known socialist in your community.
   - *a.* Ask him about the socialistic attitude toward present-day production, consumption.
   - *b.* Get his opinion on the trend of public thought regarding socialism since 1910.
   - *c.* Inquire concerning the administrative difficulties socialism is likely to meet.
   - *d.* Get his views on the relation of socialism to organized labor.

e. Learn the general attitude which socialism takes toward religion, education, marriage, charity.

2. Inquire at random among older acquaintances concerning their notions of socialism.

a. How many of the whole number appear to have given socialism any serious thought?

b. How many appear to have fixed convictions on the subject?

c. From your experience in this connection, what would you say regarding the general attitude of the American public toward socialism?

3. Confer with the best-informed anti-socialist in the community and get his reaction on the claims made by your socialistic friends. Then you will be in a fairly good position to think for yourself.

4. Analyze the answers of the business men to whom you put the following questions:

a. What is the origin of private property?

b. Why should an individual be permitted to own and control private property?

c. Would you favor the socialization of all private property?

d. How would such a change affect society? industry?

5. List any arguments you may think important in support of the government ownership of railroads. List also opposing arguments.

C

1. How would you expect a change to socialism to affect the following:

a. Farming?

b. Plumbing?

c. Retailing?

d. Manufacturing?

e. Teaching?

f. Preaching?

g. Professional begging?

h. Lending money?

i. Renting residence houses?

j. Coal-mining?

k. Professional singing?

2. Imagine a system of socialism in operation in this country.

a. What problems concerning production might arise?

b. How would society be able to secure the services of skilled enterprisers?

c. From what source would capital come?

d. What would determine the wages of plumbers, carpenters, unskilled workers?

3. To what extent, if at all, are the following socialistic:

a. Maintenance of free public schools?

b. Regulation of street-car fares?

c. City ownership of a gas plant?

d. Fixing the price of wheat?

4. Explain just why socialism should oppose labor strikes, coöperation, profit-sharing, social insurance.

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CHAPTER XXVIII

SOCIAL INSURANCE

88. The Risks of Industry

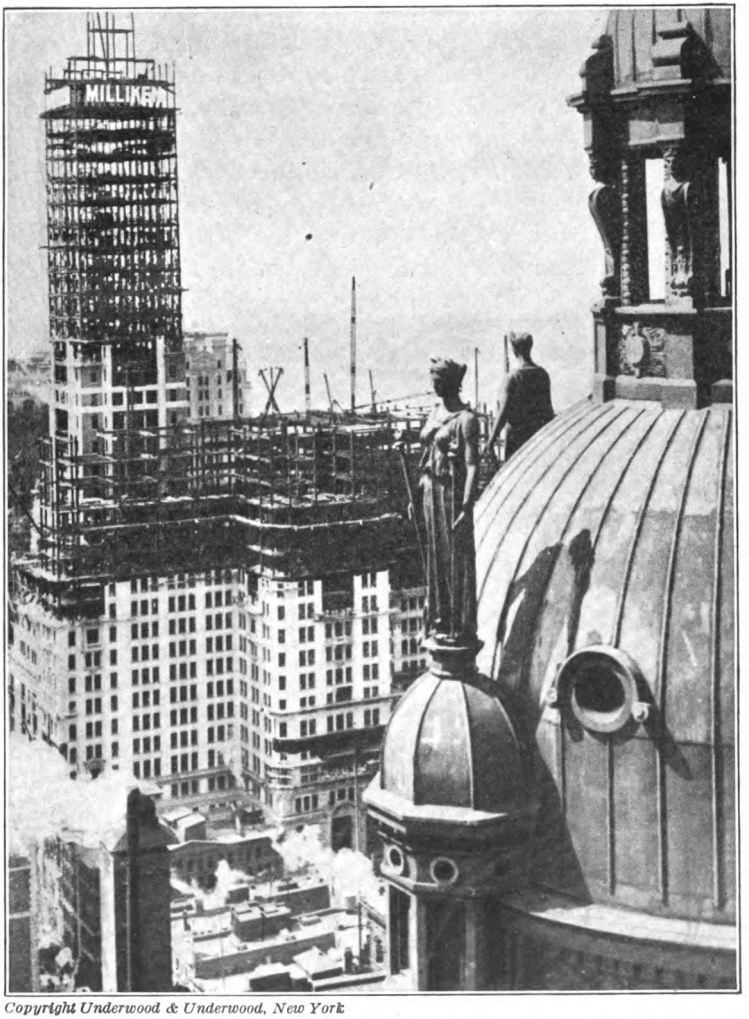
Nature of the risks. — One of the most outstanding features of modern industry is the constant risk to which laborers are exposed. Equally important is the inability of the laborer either to avoid the risk or to bear the financial burden which it may incur. We usually associate risks of industry with accidents such as cuts, burns, bruises, or even death. But risk, every laborer knows, has a wider application. Sickness from natural causes, overwork, or exposure, stares him constantly in the face. His "job" is insecure at the best, while old age can be forestalled only by premature death itself. Any one of these calamities, if long continued, endangers the worker's independence and tends to demoralize him. What to the well-to-do and the rich may appear as trifles, loom large in the experiences of the mass of labor. An accident, a few weeks' illness, or a month's idleness means self-denial on the part of every member of the family. Many an industrious worker has struggled for years only to find from time to time his scant savings swept away in doctor bills. Even though he be fortunate in these respects there still remains old age with its lower earning power, its dependence, its aches and pains. Few laborers above the age of sixty-five are independent, the great majority of them depending more or less on relatives, friends, or public charity.

Inability of individuals to carry risks. — Since it is a self-evident fact that workers are endangered on every hand, why do they themselves not adequately prepare for enforced idleness or old age? A complete answer involves many considerations. First, a worker, like other people, gives little thought, as long as he is well and strong, to accident, sickness, or old age. He sees no need for taking measures against a calamity that may never come. His greatest concern is in his immediate task. Present wants obscure future demands. Suppose, however, that the typical American workman, realizing the risks to which he was exposed, should decide to save enough to tide him over periods of sickness or idleness, or even to maintain him in decency during his old age. Even then it is doubtful that he would succeed, for no system of budgets yet devised for the workers shows any surplus above present needs, large enough for such a purpose. The simplest calculation shows that family incomes of five or six hundred dollars a year are too slender to permit of savings of any consequence. For the same reason our worker carries little or no insurance against loss, even where insurance is possible. The two chief obstacles to individual protection, therefore, are lack of foresight and lack of funds. Either alone is of no avail.

Arguments for social insurance. — If the individual will not or cannot protect himself against industrial mishaps, it is the duty of society to come to his aid. Society has a varied interest in the welfare of its workers. First, the workers are members of society. Second, society in the long run *does provide for all.* Third, society enjoys the product of labor. We have learned already that the interests of society are best promoted by giving attention to the interests of its individual members. Any large group of dependents, we may safely assume, is a menace to the social group of which they are a part. Furthermore, it is doubtful if society as a whole would be more greatly hindered

if some form of insurance were provided in place of the prevalent haphazard methods now employed in our charity work. It is a fact generally overlooked that nowhere in this country do the authorities intentionally permit individuals to starve or to go unattended if aged or ill. In other words, our state-regulated charities guarantee a minimum of food, clothing, and shelter. Since this is true, the question may be raised: Why change the plan now in general use? A change is desirable if for no other reason than to make the recipient feel that he is not an object of charity, but an unfortunate partner in a mutual protective concern controlled by the state. Finally, it is doubtful if a well-regulated insurance scheme that provides contentment as well as protection would in the long run cost society a dollar. Workers free from worry turn out more product than those who fear to take a day off with a day's loss of wages or those who return to work before they are physically fit. In any case society as such consumes the product of labor and ought out of sheer justice to be willing to protect laborers against risks for which they themselves are not responsible.

Risk an element in costs of production. — Employers have generally protested against social insurance on the ground that the payments they are called on to make are an unbearable burden. Every one of these same employers provides for the wear and tear on buildings and machinery by setting aside what is known as the replacement fund. When a steam boiler, for example, is no longer fit for use, he buys a new one from this fund. We may properly inquire as to the source of this fund. Production, we have already learned, merely means creation of utilities. The obsolete steam boiler has been transformed, so to speak, into shoes, hats, cloth, or whatever else the finished product of that particular factory happens to be. Obviously, the price of the finished product must, under normal conditions and in the long run, be large enough to provide for deterioration



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BUILDING A MODERN SKYSCRAPER.

in instruments of production. Otherwise the world would soon be out of such instruments. Why should a distinction be made between a worn-out machine and a worn-out worker? If society can afford to repair and replace steam boilers, why may it not afford to doctor its sick and injured, and to pay at the end of a worker's life a lump sum to his dependents? The world, as we shall see in the following paragraphs, is fast coming to believe that society cannot escape the responsibility; that is, that prices must be high enough to care for a portion, at least, of the costs of labor upkeeps.

89. Kinds of Social Insurance: Europe

Accident insurance. — Of the various kinds of social insurance the most important in many respects is accident insurance. In 1884 Germany provided that employers must form mutual accident insurance associations, which should collect dues from employers and pay benefits to victims of accidents or, in case of death, to the family of the deceased. The employers themselves manage the affairs of their respective associations, though the German government through its Imperial Insurance Office exercises a certain amount of oversight and acts as a mediator in all cases where an injured employee is dissatisfied with the award made by one of the associations. Ten years later Norway instituted a government-controlled system of accident insurance. The employers of that country pay into a state insurance fund premiums which are based on the size of wages and the degree of risk to which each employee is exposed. The state itself administers the funds, paying the victims of accidents according to a carefully prepared scale. In 1897 an English law provided that employers should be liable for accidents to their employees, but it did not provide that employers should organize for mutual protection; that is, each employer could insure his men against accident in some insur-

ance society, or, if he preferred, carry his own risk. One of these three methods has been adopted in practically every European country.

The administration of accident insurance is fairly easy. In Germany, the benefits paid during the first thirteen weeks following an accident come from a sick fund, which the *employees* themselves must largely provide. Obviously, the object of this scheme is to restrict the use of the funds of the employers' associations to those who suffer from serious accidents. Besides, since the first thirteen payments come largely out of the pockets of the employees, there will be less temptation for an employee to pretend to be injured in order to get a few weeks' rest.

Insurance against illness and old age. — The German plan of insuring against illness was instituted in 1883. There the state requires each employer to purchase weekly from the post office, insurance stamps for each of his employees. At least one-third of the cost of the stamps must be contributed by the employer, who may, if he chooses, deduct the other two-thirds from his employees' wages. Should an employee become ill he has his stamps, which are fastened to insurance cards, as evidence that he is insured. The provisions of the German law cover many different aspects of illness. (1) Naturally the first provision is for free medical attention. In case of serious accidents, such as the loss of a leg or an arm, the state supplies artificial limbs. (2) Free hospital service is also furnished where necessary, and special attention is given to hospitals for young mothers and babies. (3) One-half of the wages of an ill workman are paid for a maximum period of six months. (4) Finally, small benefits are paid to the dependents of deceased employees. Germany provides also for compulsory insurance against the hazards of old age. As in the case of illness employers must affix stamps to insurance cards, being permitted to withhold at most one-half of the amount from employees' wages. The

buying of stamps begins for each employee at the age of sixteen. Benefits are first paid at the age of seventy, or earlier to those who are totally incapacitated for labor. Both the premiums on the insurance and the benefits paid to the insured are relatively small. The first average only a few cents each week ($3\frac{1}{2}$ to 9) while the latter average approximately one dollar a week.

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FEEDING THE UNFORTUNATE.

Here we see homeless men being fed at public expense.

Great Britain has also provided insurance against illness (1912) and old age (1908). In each case the British law is similar to that of Germany. British employers must purchase illness insurance stamps for their employees, the two groups sharing about half and half in their cost. The benefits resemble the benefits under the German system, the chief features being

free medicine, free hospital service, and weekly sick benefits ($2.50 for men and $1.75 for women). Under the British old-age pension law any wage-earner of that country, when he reaches the age of 70, is entitled to a small pension if he can prove that he has lived in Great Britain during the past twenty-six years and does not already have an annual income exceeding about $150.

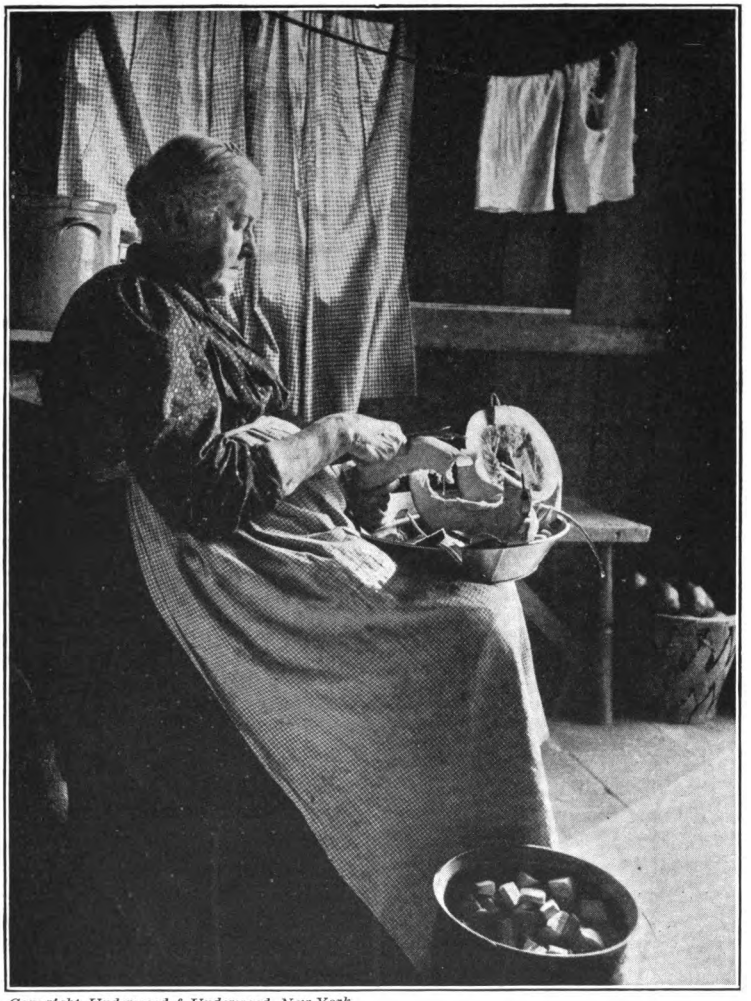
Insurance against unemployment. — The most difficult of all forms of social insurance to administer is unemployment insurance. Dishonest employees may pretend to be ill or injured only at the risk of having their dishonesty easily detected. In the matter of unemployment, however, the situation is different. No human agency yet devised could successfully distinguish between inability to find work and laziness. For that reason unemployment insurance has lagged behind. In the Belgian city of Ghent, however, the trade unions, assisted by donations from the city treasury, have undertaken to pay small benefits to the unemployed. Since the unions themselves are vitally interested in the money they pay out, abuse of the benefits on the part of the dishonest is reduced to a minimum. Great Britain has undertaken in a much more ambitious way to insure against unemployment. There employment bureaus supported by the state attempt to keep unemployed labor moving in the direction of jobs. Certain trades enjoy special protection against unemployment. In these trades employers must provide each employee with stamped cards, which guarantees, in case of unemployment, a small benefit of $1.75 a week for a maximum of fifteen weeks.

90. Progress and Outlook of Social Insurance in the United States

Constructive legislation. — The only important step taken in this country toward state regulation of social insurance has

been in connection with industrial accidents. Until recently the old common law, which lays a great deal of responsibility for accidents on the employees themselves, was in full force. Under this law an injured workman had no legal redress against his employer if it could be proved that either he or any of his fellow employees had been the cause of the accident. Even when the employer was clearly to blame it was almost impossible for an injured employee to secure damages, owing to the heavy costs of court litigation. Now and then an injured employee was able to secure a large damage from his employer, but this was the exception rather than the rule. Usually also a large portion of such awards went to pay legal fees and court costs. It must not be thought, however, that the employer had no worries in this connection. He stood in constant dread of being sued for damages resulting from accidents; and the fact that he usually won his cause in court carried little consolation, for legal successes are excessively costly.

It is little wonder then that Congress as well as various state legislatures finally gave attention to providing compulsory accident insurance. In 1908 a federal law provided accident insurance for a majority of the *industrial* employees of the government. A little later many of the states took steps to protect privately employed workmen. The result has been that more than one-half of the states have *workmen's compensation laws.* Naturally these laws vary in detail, yet they possess in general three characteristics: (1) protection for workers in hazardous occupations, (2) little or no responsibility for accidents placed on employees, (3) costs of maintaining insurance imposed on employers. In some of the states, employers *must* provide accident insurance for their employees. In others it is a matter for employers and their employees to decide; usually with the provision that the refusal of either party to enter into such voluntary arrangements as were provided by the



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DEPENDENT ON CHARITY.

Numerous private organizations assist in caring for dependent members.

state puts the party refusing at a disadvantage before the courts.

A comprehensive program for social insurance. — Leaders of American thought have given careful attention to the question of social insurance in the hope of being able to formulate a set of general principles for the guidance of legislatures in enacting workmen's compensation laws. This they have done: the most active group, the American Association for Labor Legislation, has indorsed substantially the following standards:

A. Compensation —
   Medical attendance.
   Two-thirds of regular wages.
   $20.00 weekly maximum.
   $5.00 weekly minimum.
   Funeral expenses.
   One-third of wages to widow.
B. Compensation to be the only remedy —
   Neither employer nor employee may bring suit under law of negligence.
C. Exemptions from compensation —
   Farm laborers.
   Domestic servants —
      Hotels and restaurants *excepted.*
D. Employers given option as to methods of insurance —
   Mutual associations.
   Stock companies.
   State insurance.
E. Compensation laws administered by permanent accident board —
F. Methods of settling claims —
   Arbitration.
   Accident board.

Th program is, to say the least, an ambitious one. It has for its end liberality as well as justice. It provides for the injured workman in a way so as not to offend his sense of self-respect; gives employers an opportunity to choose their own

insurance plan; and finally, it does away with undue risk, financial uncertainty, and costly litigation.

The outlook. — The awakened consciousness of the people to the burdens which society for centuries has been laying on its weakest members is a sign of social health and social progress. It points to the day when the unfortunate industrial worker can demand as a right the financial protection of society; a day when it is fully recognized that it is just as important to provide for wear and tear on men as for depreciation of inanimate machinery; a day when the strong will adequately recognize their responsibility to the weak. Social obligations, however, are two-sided. Workers as individuals and as an industrial group cannot escape their responsibility to the larger social group. All have duties. No one can stand aloof from the crowd. A mutual understanding of the rights and duties of each is likely to be the longest step to be taken in reaching what some consider the industrial millennium.

EXERCISES AND PROBLEMS

A

1. Why are manual laborers, more than others, exposed to sickness, accidents, and death?
2. Just how expensive, both from the individual and the social viewpoint, is each of these forms of disability?
3. How does it happen that such a large proportion of old people are more or less dependent?
4. Why does not the normal individual guard himself more carefully against accident and sickness?
5. Can the typical American workman afford to carry any great amount of life or accident insurance? Why, or why not?
6. Why should society undertake the protection of individuals?
7. Why is charity inadequate?
8. Just how does society guarantee a minimum to every individual member?

9. Why should society as a whole replace machines and not men?
10. What influence did the autocratic government of Germany have on the development of social insurance among the Germans?
11. In what particular respects does the English plan of social insurance differ from the German plan?
12. What are the outstanding features of accident insurance?
13. Why has social insurance developed slowly in the United States?
14. Just to what extent have we gone?

B

1. Call to mind any financial distress which you have observed caused by accident or illness.
   a. To what extent was the laborer responsible for his own accident or illness?
   b. Did he carry accident or sickness insurance? What kind?
   c. Was he a member of a fraternal order? Which?
   d. Did his employer aid him? How?
   e. Did his trade union assist him financially?
   f. How far, if at all, was he aided by organized charity?
2. Investigate any organized effort that is being made in your community to help the poor and unfortunate.
   a. What are the sources of financial support?
      i. To what extent, if at all, are these funds raised by taxation?
      ii. Enumerate other methods of raising funds (tag days, etc.).
   b. What is the attitude of the people who are helped?
   c. How is pauperization prevented?
3. Name the various agencies in your community which extend financial assistance to the distressed.
   a. Which are religious in nature?
   b. Which emphasize personal visitation?
   c. Which have membership dues?
   d. Which are purely philanthropic?
4. Inquire as to the general attitude of your older acquaintances toward the county or other public almshouse.
   a. Does any stigma attach to its occupants? Why, or why not?
   b. Does any one take the view that it is merely a method of guaranteeing a minimum subsistence to each member of society? Who?
   c. What is the viewpoint of the occupants themselves?

5. Look about for other means of extending financial assistance to the incapacitated:

a. Public hospitals.
b. Government pensions.
c. State and federal houses for disabled soldiers and sailors.
d. State institutions for the unfortunate.
e. Old people's homes maintained by fraternal organizations.

May we consider these as forms of social insurance? Why, or why not?

C

1. The assertion is often made that each individual usually has it in his own power to provide against the dependency of old age by saving systematically during his productive years.

a. Might the typical American workman be more frugal? How?
b. What other factor is necessary in saving?
c. Calculate the annual saving necessary for 40 years to insure an income of $300 a year at the age of 60 on a six per cent basis.

2. One of the best-known American cartoonists showed recently the attitude taken by men engaged in hazardous occupations. A structural steel worker standing on a narrow beam twenty floors above the street and an aëroplane pilot in his machine a thousand feet above, each observing the other, remarked how foolish some men were in taking risks. Why did each minimize his own risk and magnify the risk of the other?

3. Suppose that society should devise some plan whereby house painters would be insured by the public against accident, sickness, old-age dependence, and unemployment.

a. Would the number of house painters tend to increase or decrease? Why?
b. How would the wages of house painters be affected?
c. What would be the probable effect on the cost of painting a house?
d. In what way, if at all, would taxes be affected?
e. Would a plumber's income be changed as a result? How?

4. Would you class the following as forms of social insurance:

a. Government pensions?
b. Free treatment in railroad hospitals?
c. State aid for the blind?

d. Insane hospitals?
e. Retiring allowances to aged preachers?
f. Teachers' pensions?
g. Payments from a firemen's pension fund?

SUPPLEMENTARY READING

ELY, *Outlines of Economics*, 3d ed., pages 57, 587–595.
FETTER, *Economics*, Vol. II, pages 349–365.
SEAGER, *Principles of Economics*, pages 598–612.
TAUSSIG, *Principles of Economics*, 2d ed., Vol. II, pages 323–345.

CHAPTER XXIX

THE SHARE OF THE GOVERNMENT IN DISTRIBUTION (TAXATION)

91. Government Revenues and Government Expenditures

Revenues of various taxing bodies. — The number of taxing bodies to which any particular individual may be subject varies from a few to twenty-five or thirty. Farmers as a rule are subject to only four or five such bodies, while a dweller in a large city, with its parks, hospitals, sewerage system, high schools, city colleges, or technical schools, and with numerous other agencies for the betterment of social conditions, finds a much greater number of official boards which have authority to tax his property. Our problem will be much simplified, however, if we confine our attention to (1) national taxes, (2) state taxes, and (3) local taxes. The national government possesses practically unlimited power in the matter of taxation, and, strange as it may appear, needs, under normal conditions, the least revenue. The states have much less power to lay taxes, though their needs in times of peace are greater than those of the national government. Finally, local needs — city, school, county, township — are the greatest of all; yet they must be supplied by taxing bodies hedged about with constitutional or statute restrictions. In most states, for example, the taxing power of each school board is limited to a small per cent of the total wealth in the school district. This limitation may be imposed by constitutional provision or by legislative enactment. Similar

limitations are very generally placed on city, county, township, road, bridge, park, and other taxes. We should be warned at this point that the emphasis we may lay on the restrictions on local taxing boards is in no way indicative that they are undesirable, or even detrimental to the best interests of society.

Receipts and expenditures of the national government. — Since the second year of the Civil War the receipts of the national government, aside from loans, have been largely derived from import (tariff) and excise (internal tax) duties. From approximately sixty million dollars in 1860 the annual ordinary receipts of the national government rose to three quarters of a billion dollars in 1914, and, under the stress of the Great War, to something like eight billion in 1919. The expenditure of these vast sums has taken a multitude of forms. During the last year prior to the outbreak of the War in Europe in 1914 the ordinary expenditures were as follows:

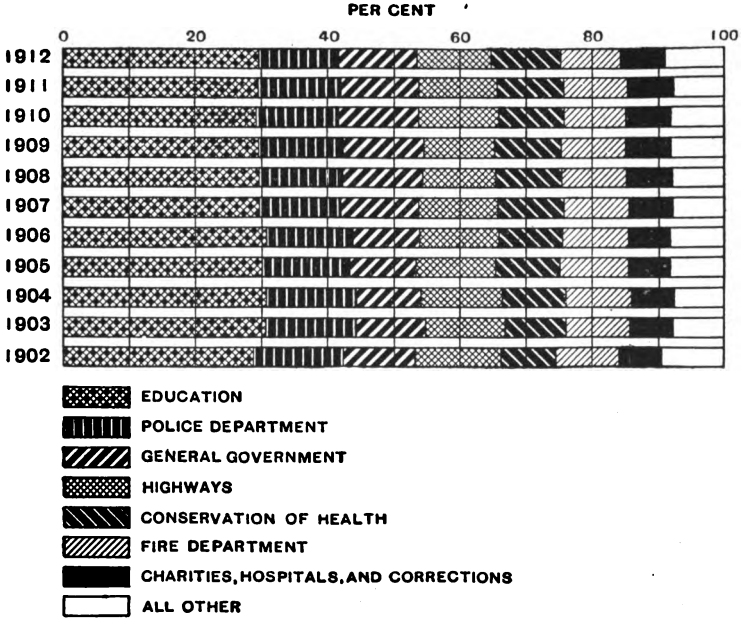
Civil and miscellaneous	$170,530,235.45
War Department	173,522,804.20
Navy Department	139,682,186.28
Indians	20,215,075.96
Pensions	173,440,231.12
Interest on the Public Debt	22,863,956.70
Total	$700,254,489.71

It is to be noticed that federal expenditures are undertaken primarily for national defense; that is, the federal government assumes the duty of protecting state and local governmental units from foreign interference, leaving them free to manage their own affairs: about 70 per cent of the entire expenditures go directly or indirectly to war purposes.

State and local expenditures. — State expenditures go largely to the militia, to schools, to charitable institutions, and to the maintenance of the courts. Their chief sources of revenue are real estate taxes, and license fees of various sorts. The

last few years have seen the activities of the states in these respects grow rapidly. The causes are obvious. People are more and more coming to the conclusion that the state government is in a position to take over many so-called private functions at a material saving in money cost. Nowhere else,

EXPENSES OF THE CITIES OF THE UNITED STATES FOR VARIOUS PURPOSES: 1902–1912.



however, have receipts and expenditures grown as in the local units. The incorporated cities of this country spend practically as much money each year as the national government and the forty-eight state governments combined. In 1914 the budget of the city of New York equaled approximately the total of all the state budgets west of the Mississippi River. In 1913

the per capita expenditures of cities was almost thirty dollars, while the same item for state expenditures was four dollars, and for the national government ten dollars. Heavy city expenditures have been accompanied in too many cases by extravagances and mismanagement. The influence that goes with the expenditure of municipal funds is an attraction which few local politicians can resist. It means patronage and hence, power. Here, then, is a problem which must be confronted, and unless the next generation aids in solving it, young people now being educated by the state shall not have returned to society the full measure which it has a right to expect from its heavy investments in free schools.

Definition of a tax. — It will add to clearness of the subject, if, at the outset, we distinguish between a tax and two other revenues that resemble taxes. "*A tax is a payment, usually in money, exacted by the government for the purpose of carrying on public enterprises for the common good.*" It will be noticed that payment is compulsory, and that expenditures are made for the benefit of society as a whole. Examples are the general property tax, income and inheritances taxes, and excises. Resembling a tax somewhat are the *special assessment* and the *fee*. As its name suggests, the special assessment is levied for the purpose of defraying a special public charge. Professor Seligman defines it as "a payment made once for all to defray the cost of a specific improvement to property undertaken in the public interest, and levied by the government in proportion to the particular benefit accruing to the property owner." Of the several kinds of special-assessment enterprises the best-known is the construction of city pavements. The same authority defines a fee as "a payment to defray the cost of each recurring service undertaken by the government primarily in the public interest, but conferring a measurable special advantage on the fee payer." The principle underlying the

fee is public regulation, though individuals that pay it are usually benefited. Fees are charged for marriage licenses, for recording of deeds, and for numerous other public services of like nature.

92. Bases of Taxation

The benefit principle of taxation. — One of the very generally accepted principles of taxation is that taxes may be levied according to the benefits derived; that is, the amount of each person's tax should correspond to the services which society renders him. Obviously, however, such a principle has, in practice, serious limitations. Sometimes those who are least able to pay taxes, *need* most the state's aid. The lower income groups, which pay a relatively small share of the school taxes, are the most highly favored by public education, for it would be cheaper for the well-to-do, in lieu of paying school taxes, to educate their own children in private schools. The truth of this statement becomes more striking when we consider that the property of unmarried persons and childless married couples is taxed for school purposes regardless of the fact that they receive no *direct* benefit in return. It has only been by short and somewhat halting steps that American society has arrived at the point where it is willing to abandon the benefit theory in levying school taxes. Not many years ago our state courts were "swamped" with suits instituted by property-owners in an effort to be relieved from being taxed to educate other people's children. In fact, in one populous Middle Western state the high school system owes its existence to the legal fiction that high school education is authorized by the statute which authorizes "common school" education. Numerous other exceptions may be found to the benefit theory of taxation. We do not inquire how much taxes an individual has paid when we admit him to a public hospital,

a public library, or to a public park. It is indeed fortunate for society that the benefit theory has been partially abandoned, for it fails in general to make the strong bear some of the burdens of the weak. Even the well-to-do who receive no direct benefits from school taxes profit indirectly and in the long run; for public education, if it means anything at all, ought to stand for a more enlightened citizenship, for higher industrial efficiency, and for greater security for persons and property.

The ability principle of taxat on. — It accords more with our sense of justice to levy taxes according to ability to pay. This policy we follow in asking for Y. M. C. A. and Red Cross subscriptions, and even in urging the people to purchase government bonds. But there is also an economic justification for compelling the well-to-do to pay taxes out of proportion to what may *appear* to be the benefits derived. Clearly, the millionaire ought to contribute more than a aboring man to protect the country against foreign invasion. Both have, or ought to have, equal personal interests in preserving the sovereignty of the nation. In addition, the former has extensive property rights which he expects the government to protect. Enforced contribution according to ability, if carried into the realm of prices, would, however, lead to ridiculous results. To employ an economic term, it would destroy what we called in an earlier chapter the consumers' surplus.

Acceptance of the ability principle paves the way for two other considerations. Shall a tax be *proportionate* or *progressive;* that is, shall persons pay in exact proportion to their means, or shall the rate of pay increase with an increase in wealth? To make our problem concrete let us suppose that we have under consideration the assessment of taxes *against* three individuals having property valued respectively at $1,000,000, $2000, and $500. A one per cent proportionate rate would produce $10,000, $20 and $5 in taxation, thus diminishing the wealth of

these three to $990,000, $1980, and $495. The question is: Has each individual paid according to his ability? Is the sacrifice the same in the three cases? One may mean merely the foregoing of a costly banquet; another, the loss of a comfort; while the third may mean sacrifice. To place the three on a more nearly equal basis *progressive* taxation is employed. Here, we may suppose, the individual with the lowest income pays one per cent, the next, two per cent, while the wealthiest of the three pays ten per cent. Then the amounts raised from the three would be $5, $40, and $100,000. The use of the progressive system has been confined very generally in this country to income and inheritance taxes, largely because it is there, according to an old saying, that "the goose can be plucked with the least squawk."

Justice and expedience in taxation. — Every one that has had experience in levying taxes lays emphasis in discussing them on the justice of taxation. It would be nearer the truth, however, to say that *expediency* is more often the basis on which taxing laws rest. Lawmakers know full well that no tax, whatever its size or character, is popular. For that reason they are influenced in their legislation by the desire to create as little opposition as possible. Hence they cling to old taxes, to indirect taxes, and to taxes on the rich. Paying an old tax, however burdensome and unjust it may be, in time becomes a habit much like paying the monthly grocery bill or the house rent. In other words, people become reconciled to its harshness. Indirect taxes are hidden in prices of goods, and hence are usually paid unconsciously by consumers. Few of us ever bother about the tax on tobacco, chewing gum, perfume, or playing cards. In making our purchases we compare only the value of the article to us with its price. Finally, taxes imposed on the rich are not likely to prove unpopular. The rich themselves may protest, but without support or sympathy.

93. Kinds of Taxes

Shifting and incidence of taxation. — An important phase of taxation relates to shifting and incidence. We have just noticed that the purchaser of a cigar gives little or no attention, if indeed he be aware of it, to the fact that a portion of the purchase price is a tax which the manufacturer has paid to the national government and then shifted to the retailer, who in turn shifts it to the purchaser. The shifting of the tax on tobacco is not unique. Practically every tax can be passed on from one buyer to the next until eventually it is paid by the consumer. Duties on imports (tariff duties) are often shifted a great many times, the number depending on the number of transfers of ownership. The importer of English broadcloth pays a certain tax to the government, which he merely adds to the price of his goods. This same tax comprises a portion of the price which the garments made from it bear, and it is finally paid, not by the retail clothier, but by his customers. House taxes too emerge in the form of higher rents, while taxes on business of all sorts are largely absorbed in higher prices. It is generally held, however, that *land taxes cannot be shifted;* that is, the owner of a piece of land must bear the tax assessed against it. Most people doubt the accuracy of this statement. Yet it becomes obvious when we remember that the return from land is economic rent, which depends entirely on its relative superiority in the matters of production and location; and that, if the tenant is paying full economic rent, he cannot afford to pay more; also that the tenant cannot shift the tax by advancing the price of his products, for this price is fixed by the marginal producer.

The general property tax. — The best-known tax of all is the general property tax. As the term suggests, this is a tax on wealth irrespective of its nature — that is, a tax on real

estate and personal property. This tax is assessed by one township or county official and collected by another. It provides the bulk of local and state revenues; and for that reason, if for no other, it ought to be sound in principle. But usually it is not. First of all, the typical general property tax law provides for the same rate of taxation on personal property as on real estate; and as a result it defeats its own purpose, for only the most scrupulous — so few as to form a relatively small class — will disclose their entire personal wealth to a tax assessor. This does not imply that the American people are liars or even tax-dodgers. It does mean, however, that the average taxpayer, knowing that his neighbors do not disclose their personal property, feels justified in self-defense to refrain from disclosing his own. The general property tax glares with inequalities even if nothing except real estate were taxed. Usually a state imposes, for state purposes, one flat rate over all its counties. Each county has its own body of assessors. As a result, widely different valuations are often placed on pieces of property having about the same value. If, to take an extreme example, the state tax rate is 50 cents on each hundred dollars' valuation, and one assessor estimates the average value of farm horses at $30 and another assessor at $50, one group of horse owners is overtaxed or the other group is undertaxed. Similar inequalities may easily occur in counties having township organizations. Some attempts are made, however, to equalize taxes both within states and within counties. To that end boards of equalization and boards of review have been established. If the general property tax is so unsatisfactory, why do not the voters abolish it and substitute a better kind of taxation? The answer seems to be that an old tax whose exactions are known is better than a new tax which may carry unknown burdens. In other words, the typical taxpayer prefers to let well enough alone.

The income tax. — The practice of imposing taxes on incomes has been general in Europe for years, and even in this country several of the states have had income-tax laws. During the Civil War the national government collected a tax on incomes. Later, in 1894, Congress again provided for a federal income tax. A few years later the United States Supreme Court declared this law unconstitutional on the ground that it was a direct tax not apportioned, as the Constitution required, among the states according to population. The people then took matters in their own hands. The result was the Sixteenth Amendment, which gives the federal lawmakers authority to tax incomes. The first income-tax law under the new amendment exempted all incomes below $3000 ($4000 for man and wife), and provided a *progressive* tax on all incomes above that point. The total amount raised the first year (1915) was approximately one hundred million dollars. Our entry into the Great War (1917) caused Congress to lower the exemption to $1000 and $2000 and to increase rates above that point..

Until recently it was the general opinion that an income tax would prove to be unsatisfactory in this country. Our few years' experience, however, now leads us to the contrary view. This tax falls only on the well-to-do and the rich and it is difficult to shift. It comes out of incomes, is easily collected, and has not proved excessively unpopular even among those who feel its exactions. It seems safe to predict, therefore, that the income tax will become increasingly important, both as a source of revenue and as a means for lessening the inequalities in distribution.

Inheritance taxes. — An inheritance tax is collected on estates as they pass into the possession of heirs. Practically all states have such a tax, though less than a generation ago the right of the state to share in the estates of its citizens was very generally regarded with disfavor. Like the income tax,

the inheritance tax is usually confined to the estates of the well-to-do and the rich, and almost always bears a progressive rate. Unlike an income tax, however, an inheritance tax is paid from *capital* and not from income. The principle involved in taxing estates is of great social importance. Often a deceased has no near heirs, none, let us say, nearer than a second or third cousin. Why, in the absence of a will, should these distant relatives have a greater interest in the estate than the neighborhood where the deceased had spent his whole life, or the business men with whom he had been associated for years? On what common-sense ground can a distantly related person, one perhaps whom the deceased had never known, claim to inherit property? Both questions were revolutionary a generation ago. They are less so now. Another generation may see them answered in the interest of the state.

Other kinds of taxes. — The forms of taxation just noticed do not by any means exhaust the list, though in many respects they are the most important. Others that might have been discussed are tariff duties, excise taxes, taxes on transactions, corporation taxes, business taxes, license taxes, and poll taxes. Each has its own problems of administration; each serves a particular purpose; but all at bottom involve the same general principles which we have already noted.

EXERCISES AND PROBLEMS

A

1. Why are there often so many taxing bodies in a community?
2. What only restricts the power of Congress to lay taxes?
3. Is this restriction important? Why, or why not?
4. In what ways are taxing powers of local units limited?
5. Why should the right of a school district to tax itself be regulated by state law?
6. Are these regulations desirable? Explain.

7. Account for the increase in the revenues of the national government during the past half century.

8. What is the chief money-spending function of the national government?

9. What are the principal revenue sources of the school district? the county? the city?

10. What is the justification for government expenditures where private funds would otherwise be used?

11. What risks are involved in government expenditures?

12. Why, or why not, should taxes be levied according to benefit?

13. What is the relation between the need of public assistance and the ability to pay taxes?

14. Why should a school tax levied according to the benefit principle be impracticable?

15. How does the ability principle of taxation tend to equalize incomes?

16. What is the essential difference between a proportionate tax and a progressive tax?

17. What are the merits of each?

18. Just what is meant by "expediency" in taxation?

19. Why is an old tax usually preferred to a new tax?

20. When is a tax said to be "shifted"?

21. Why are taxes usually easy to shift? Explain.

22. Which taxes are the easiest to shift? Why?

23. What is a "general property tax"?

24. What are its chief defects?

25. Why do many people, otherwise honest, falsify their personal property tax-schedules?

26. Why should income taxes and inheritance taxes be confined to the well-to-do classes?

27. What is the essential difference between an income tax and an inheritance tax?

28. Just why was a constitutional amendment necessary to legalize a federal income tax?

B

1. Get from the local tax-collector or from the proper county official, information concerning rates of taxation, purposes for which various taxes are imposed, the cost of collection, and the attitude which people take toward each kind of tax.

2. Interview some friendly taxpayer.
   a. How does he regard the school tax?
   b. Has he suggestions to offer concerning changes in taxation?
   c. Does he consider the valuation placed on his own property for taxing purposes equitable compared to the valuation placed on his neighbors' properties?
   d. Get his opinion on the weakness and strength of the general property tax.

3. Make a list of enterprises supported out of public funds, which enterprises provide services free to all, regardless of their tax-paying abilities.

4. Secure, if possible, published lists of personal property assessments.
   a. Do there appear to be any discrepancies between the valuation placed on the personal property of any individual and the amount of personal property he is *reputed* to possess?
   b. How does the total valuation of personal property compare with the total valuation of real estate for the same area?
   c. Is there in your community a limit below which personal property is not assessed? If so, why?

5. Inquire of some tax-assessing official about the difficulties of determining property values, the inclination of people to undervalue their own property, the general dissatisfaction with valuations, and the criticism made of them.

6. Suppose you were a member of a lawmaking body which had before it a bill for taxing boarding-house keepers ten dollars a year each, on the ground that the money thus raised in each city would pay the salary of a boarding-house inspector for that city.
   a. What is your first reaction on the question?
   b. Do boarding-houses need to be inspected? Why?
   c. If so, who should pay the expense of inspection? Why?
   d. How would the fact that you represented a college town or a mining district affect your vote?
   e. How would you expect members from rural districts to vote?

C

1. The property of the residents of a certain section of one of the largest cities in the United States is taxed by twenty-seven taxing boards.
   a. Why have so many taxing boards been developed?

b. Is it probable that one taxing body could accomplish the same purpose? Explain.

c. Would you expect the aggregate rate to be higher in one case than in the other? Why, or why not?

2. In the matter of official patronage, measured either in numbers or in salaries, the Mayor of New York City ranks alongside the President of the United States.

a. Account for this fact.

b. Compare the receipts and expenditures of the two organizations.

c. Contrast the governmental functions of the two organizations.

3. The argument is often advanced that each should be taxed according to the benefit he gets from the expenditure of public money.

a. What effect do good schools have on the number and character of the people in the community?

b. How does an increase in population together with a rise in its standards affect property values? legitimate business?

c. What return, then, does a childless property-owner or a childless business man get from his school taxes?

4. The administration of a tax levied according to the benefit principle would be extremely difficult.

a. *When* should each property holder pay his taxes for the support of a city fire department?

b. *What* should each pay toward maintaining a public park? a health bureau?

c. *Why* should not nonresident owners of vacant lots be entirely exempt from such taxes?

5. The statement that a land tax cannot be shifted needs to be examined with care. Would the shifting be possible if the tax collected were spent on building improved wagon roads? Can you think of other expenditures that might add to the productiveness of the land taxed, and hence increase its economic rent?

SUPPLEMENTARY READING

BULLOCK, *Introduction to the Study of Economics*, 3d ed., pages 529–587.
ELY, *Outlines of Economics*, 3d ed., pages 643–739.
SEAGER, *Principles of Economics*, pages 472–535.
SELIGMAN, *Principles of Economics*, 5th ed., pages 267–270, 303.
TAUSSIG, *Principles of Economics*, 3d ed., Vol. II, pages 483–560.

CLASSIFIED COURSE OF READING

In the brief lists that follow, the standard college texts referred to at the close of each chapter are listed as a matter of convenience, together with additional titles, under *General Economics*. In choosing the rest of the titles, the author has attempted to confine himself to what are coming to be known as "economic problems." Those best adapted to beginners are marked with an asterisk [*]. The rest may profitably be studied by teachers and business men; also by advanced pupils.

I. General Economics

*Bullock, C. J.: *An Introduction to the Study of Economics.*
*Carver, T. N.: *Principles of Political Economy.*
Clark, J. B.: *The Distribution of Wealth.*
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INDEX

Advertising, influence of, 40, 41.
Agricultural rent, discussion of, 330–334.
Agriculture, developments in, 87, 88; tendencies in, 109; varying costs in, 116; extent of, 118; application of the law of diminishing returns to, 122–126.
American Federation of Labor, influence of, 312, 313.
American industrial revolution, nature of, 86.
Arbitration, labor disputes settled by, 319–321.

Balance of trade, nature of, 247, 248.
Baltimore and Ohio Railroad, opening of, 156.
Bank check, form of, 228.
Bank note, nature of, 228.
Bank statement, explanation of, 231–233.
Banking, history of, 227–237.
Barter, disadvantages of, 22.
Bill of exchange, nature of, 245–249.
Bimetallism, description of, 213, 214, 217, 218.
Bland-Allison Act, provisions of, 220.
Bonds, nature of, 93.
Borrower, viewpoint of, 346, 347.
Building and loan association, importance of, 74; statement of, 76–78.
Business man, characteristics of, 357, 358.
Buyers' schedule, nature of, 59.
Buyers' surplus, nature of, 57.
By-products, utilization of, 110.

California, production of gold in, 120, 218.
Canals, construction of, 156.
Capital, growth of, 85; definition and origin of, 99; discussion of, 130–139.
Capital (*Das Kapital*), socialistic doctrines in, 371, 372.
Capitalistic production, nature of, 132–134.
Chain stores, business of, 178, 179.
Checks (bank), use of, 244.
Child labor, opposition to, 322.
Child labor laws, enactment of, 377.
Christian socialists, leaders of, 371.
Circulating capital, definition of, 134, 135.
City sites. *See* Urban land.
Class antagonism, causes of, 287, 289.
Clayton Anti-Trust Act, provisions of, 190. *See* Trusts.
Closed shop, definition of, 315.
Closed union, definition of, 315.
Coinage, operation of, 213, 214, 217, 218.
Comforts, definition of, 30.
Commerce, discussion of, 241–252.
Commercial bank, functions of, 229.
Commercial education, scope of, 9.
Communist Manifesto, extract from, 372.
Competition, nature of, 141–145; influence on monopoly price of, 147, 148; among railroads, 158–161; profits under, 363.
Complex division of labor, definition of, 102.
Conciliation, labor disputes settled by, 319.
Constitution of the United States, guarantees of, 323.
Consumers' goods, definition of, 100.
Consumers' surplus, definition of, 50, 51.
Consumption, nature of, 19, 20, 29–

37; laws of, 40–51; aspects of, 67–79; habits of, 78.
Coöperation, effect on profits of, 363–366; by the government, 378.
Copyrights, basis of, 183; laws regarding, 185.
Corporation, a form of business organization, 90–94.
Corporation tax, place of, 407.
Costs of production, variations in, 115; risk an element in, 384–386.
Credit, effect of business expansion on, 275, 276.
Credit money, forms of, 209.
Crime, causes of, 31.
Crises, causes of, 274–277.
Currency. *See* Money.
Cutthroat competition, nature of, 160.

Deductive reasoning, use of, 16.
Demand, nature of, 32–34, 54, 55; definition of, 33; elasticity of, 34–37; supply and, 147. *See* Price, Supply.
Department stores, function of, 176, 177.
Diminishing returns, law of, 122–128.
Diminishing utility, law of, 44, 45.
Direct marketing, nature of, 176–179.
Discriminations in railroad rates, 159, 160.
Distribution, inequalities in, 12; nature of, 23, 24; definition of, 283.
Distribution of wealth, account of, 283–292.
Division of labor, extent of, 100–108; social advantages of, 105; disadvantages of, 105, 106.
Dollar, weight of gold, 204, 205.

Economic activity, motives behind, 29–32.
Economic good, definition of, 10.
Economic law, nature of, 17.
Economical consumption, nature of, 69–72.
Economics, definition of, 4; nature of, 16–19; art side of, 17; material for the study of, 18, 19; divisions of, 19–24.
Education, industry and, 8; tendencies in, 9; influence of, 299–301, 358.
Efficiency, elements in, 9, 102–104; consumption and, 68, 69; relation of wages to, 303–306.
Eight-hour day, advantages of, 315.
Elastic currency, definition of, 215, 216.
Elkins Amendment, provisions of, 165.
Embargo Act, importance of, 86.
Employees. *See* Labor, Organized labor, Wages.
Employers, organization of, 318, 319.
English industrial revolution, nature of, 85, 86.
Enterpriser, functions of, 100.
Exchange, nature of, 22.
Expenditures, nature of governmental, 397–401.
Extensive cultivation, nature of, 124–126.

Falling prices, effects of, 276, 277.
Family budgets, study of, 287.
Federal Reserve Bank Law, provisions of, 236, 237.
Federal Reserve notes, nature of, 222, 223.
Federal Trade Commission, establishment of, 190.
Fertility, a factor in rent, 334.
First United States Bank, account of, 216, 217, 233, 234.
Fisheries, extent and importance of, 120–122.
Fixed capital, definition of, 134, 135.
Forests, extent and character of, 118.
Form utility, definition of, 20.
Free good, definition of, 10.
Free land, effect on distribution of, 283, 284.
Free silver, agitation for, 221, 222.
Free trade, basis of, 262, 263. *See* Protective tariff.
Futures, the buying of, 360, 361.

General property tax, nature of, 404, 405.

Germany, social insurance in, 386–388.
Gold, not a free capital good, 137; price of, 205; characteristics of, 201, 202; market and mint values of, 213, 214; world production of, 217; production in California of, 120, 218.
Gold certificate, nature of, 208. *See* Representative money.
Gold points, definition of, 248.
Gold reserves, functions of, 209.
Gold standard, adoption of, 222.
Gold supply, automatic checks on, 252.
Good, definition of, 9. *See* Free good, Economic good.
Government expenditures, effect of price fluctuations on, 271, 272.
Government operation of industry, problems of, 378, 379.
Government paper money. *See* United States notes.
Government regulation, influence on price of, 149, 150; railroads under, 162–165; a substitute for socialism, 377–379.
Great Britain, social insurance in, 388, 389.
Greenbacks. *See* United States notes.
Gresham's law, explanation of, 215.

Hamilton, Alexander, reports on banking, 234; on the tariff, 263.
Heredity, influence of, 358.
Home-owning, in the United States, 290.
Honesty, an element in efficiency, 103.
Hours of labor, lessening of, 105.
Human motives, examination of, 374, 375.

Imagination, a factor in success, 357.
Immigration, different aspects of, 5; problems of, 323–326.
Incidence of taxation, definition of, 404.
Income, education and, 8; distribution of, 285–287; influence of education on, 299–301.
Income tax, federal and state laws on, 406.
Index numbers, principle of, 273, 274.
Indians, medium of exchange among, 199.
Indirect marketing, basis of, 173, 174; wastes in, 175, 176.
Indirect production, advantages of, 132.
Individual capital, nature of, 137, 138.
Individual, society and the, 6.
Inductive reasoning, use of, 16.
Industrial efficiency. *See* Efficiency.
Industrial Workers of the World, program of, 313.
Industry, individual viewpoint of, 6; social viewpoint of, 7; education and, 8; organization of, 85–94; diversification of, 108; place of capital in, 133; effect of price level on, 274–277.
Inefficiency, causes of, 289–291.
Inheritance tax, characteristics of, 406, 407.
Initiative, a factor in success, 357.
Insurance. *See* Social insurance.
Intensive cultivation, nature of, 124–126.
Interest, discussion of, 345–353.
Interest rate, method of fixing, 349, 350; variation in, 351–353.
Inter-regional trade, in the United States, 241–243.
Interstate Commerce Act, provisions of, 163–165.
Investing, nature of, 131.
Investment bank, nature of, 230.
Investments, growth of, 75; made liquid, 94.
Iron ore, production of, 120.

Joint costs, principle of, 161.

Knights of Labor, sketch of, 311, 312.

Labor, a factor of production, 97. *See* American Federation of Labor, Organized labor, Wages.
Labor legislation, need for, 321–324; character of, 323.

Labor problems, nature and account of, 311–324.
Laissez faire, the doctrine of, 141–143. *See* Mercantilism.
Land, importance in human welfare of, 11, 12; a factor of production, 97, 114–128.
Land values, relation of economic rent to, 339.
Large-scale production, advantages of, 108–110.
Law, definition of, 4.
Law of monopoly price, explanation of, 145–147.
Laws of economics, application of, 17, 18. *See* Economic law, Consumption, Diminishing returns, Diminishing utility, Marginal utility.
Lender, viewpoint of, 348–349.
Location, a factor in production, 117, 334.
Lumber, production of, 118.
Luxuries, nature of, 30, 31.

Mail-order houses, functions of, 177, 178.
Malproduction, definition of, 275, 276.
Mann-Elkins Amendment, provisions of, 165.
Manufactures, domestic system in, 85; developments in, 87; location of, 108.
Marginal utility, law of, 46–51.
Market, production for, 169, 170.
Market price, determination of, 56–63. *See* Price.
Market ratio. *See* Gold, Silver.
Marketing, nature and extent of, 169–179.
Marx, Karl, a socialistic leader, 371.
Maximum prices, nature of, 56.
Medium of exchange. *See* Money.
Mercantilism, doctrine of, 141–143. See *Laissez faire*.
Merchandising. *See* Retailing.
Middleman, functions of, 21; place of, 173.
Military self-sufficiency, maintenance of, 265.
Minimum prices, nature of, 56.
Minimum wage, proposals for, 392.
Mining, varying costs of production in, 117.
Mint ratio. *See* Gold, Silver.
Monetary laws, account of, 213–224.
Money, introduction of, 171; uses of, 199–209; kinds of, 223; fluctuations in the value of, 269–271.
Monopolistic profits, concealment of, 150, 151.
Monopoly, limitations on, 147, 148; contrasted with competition, 141–151.
Monopoly price, law of, 145–147.

National bank law, operation of, 235, 236.
National bank notes, issue of, 219.
Natural resources. *See* Land.
Necessaries, definition of, 30.
New England, industry in, 108; agriculture in, 117.
New Zealand, arbitration laws of, 321.
Noncompeting groups, existence of, 295–303.
No-rent land, definition of, 332–334.

Obedience, an element in efficiency, 103.
Observation, importance of, 18.
Occupation, the choice of, 302, 303.
Open shop, definition of, 315.
Open union, definition of, 315.
Organized labor, spirit of, 7; aims and methods of, 313–319.
Overproduction, definition of, 275, 276.

Par of exchange, definition of, 248.
Partnership, advantages of, 89, 90.
Patent Law of the United States, provisions of, 183–185; objections to, 186.
Patents, basis of, 183; number of, 184.
Piece wages, definition of, 306, 307.
Place utility, definition of, 21.
Plain living, gospel of, 70, 71.
Point of diminishing returns, definition of, 123.
Political science, definition of, 3.

Population, growth of (1800–1910), 98; in cities (1790–1912), 101, 104.
"Pork barrel" legislation, nature of, 378.
Possession utility, definition of, 21.
Price, demand and, 33, 34; relation of demand and supply to, 54–63; influence of monopoly on, 145–147; effect of the flow of gold on, 252; relation of economic rent to, 338, 339.
Price-fixing, difficulties of, 192, 193.
Price fluctuations, influence on demand of, 34–37; guarding against, 269–277, 359–361.
Private property, institution of, 375–377.
Production, nature of, 20–22; factors of, 97–100; varying costs in, 115–117, 359–363.
Profits, discussion of, 356–366.
Profit-sharing, nature and definition of, 307, 308.
Promissory note, form of, 232.
Protective tariff, discussion of, 256–265.
Public utilities, regulation of, 190–192.

Quantity theory of money, explanation of, 216.

Railroads, developments in, 87; consolidation of, 109; building of, 156–158; mileage of, 157; competition among, 158–161; taken over by the government, 374. *See* Rates.
Rates, making of railroad, 161, 162.
Rates of exchanges, fluctuations in, 248, 249.
Rent, discussion of, 330–341.
Replacement fund, nature of, 135, 136, 384–386.
Representative money, forms of, 206–208.
Resumption of specie payments, account of, 208, 209, 219, 220.
Retailer, place of, 172, 173.
Retailing, function of, 21; successful coöperation in, 365–366.
Revenues, sources of governmental, 397–401.
Risk, relation of interest rate to, 351; in industry, 382–386.

Sabotage, definition of, 313.
Saving, avenues of, 74–78; nature of, 131.
Savings banks, importance of, 74; functions of, 229, 230.
"Scab" labor, definition of, 316.
School attendance, in the United States, 301.
Second United States Bank, account of, 216, 217, 233, 234.
Sellers' schedule, nature of, 60.
Sellers' surplus, nature of, 57.
Sherman Anti-Trust Act, provisions of, 189.
Sherman Silver Purchase Act, provisions of, 221.
Shifting of taxation, definition of, 404.
Short hauls, nature of, 162.
Silver, market and mint ratios of, 213, 214; world production of, 214; demonetization of, 220–222.
Silver certificate, nature of, 208. *See* Representative money.
Silver dollar, weight of, 206.
Simple division of labor, definition of, 101.
Single enterpriser, place of, 88.
Single tax, discussion of, 335–338.
Smith, Adam. See *Wealth of Nations*.
Social capital, nature of, 137, 138.
Social insurance, discussion of, 382–393.
Socialism, discussion of, 369–379.
Social problems, caused by unequal distribution, 287–291; effect of immigration on, 326.
Social sciences, nature and content of, 3; inter-relation of, 5.
Social unrest, causes of, 71, 72.
Society, industrial viewpoint of, 3–12; the individual and, 6.
Specialized capital, definition of, 136, 137.
Speculation, function of, 360, 361.
Standard of deferred payments. *See* Money.
Standard of value. *See* Money.

Standard Oil Company, organization of, 187; dissolution of, 189.
State banking, era of, 235.
State finances, character of, 398–400.
Steadiness, an element in efficiency, 103.
Sterling exchange, definition of, 248–250. *See* Gold points, Par of exchange.
Stock exchange, functions of, 93, 94, 219.
Stocks, kinds of, 92, 93.
Strike, effectiveness of, 316–319.
Substitution, nature and extent of, 78, 79; influence of, on monopoly price, 148, 149.
Supply, nature of, 54, 55. *See* Demand, Price.

Tariff. *See* Protective tariff.
Tariff legislation, account of, 256–261; basis of, 261, 262.
Tax, definition of, 400, 401.
Taxation, nature of, 24; as an equalizer of incomes, 292; bases of, 401–403; justice and expediency in, 403.
Taxes, discussion of, 397–407.
Territorial division of labor, principle of, 106–108.
Thrift, importance of, 72–78.
Time utility, definition of, 21.
Time wages, definition of, 306, 307.
Trade. *See* Commerce.
Trade acceptances, nature of, 244, 245.
Trade debts, payment of, 243–247.
Trade-marks, basis of, 183; laws regarding, 185, 186.
Transportation, function of, 21; developments in, 87, 154–158.
Trusts, characteristics of, 109; history of, 186–188; opposition to, 188, 189; regulation of, 189, 190.

Unearned increment, definition of, 335–338.
Unemployment, risks of, 382, 389; socialistic attitude toward, 370.
Union. *See* Organized labor, American Federation of Labor, Closed shop, Closed union, Wages.
United States notes (greenbacks), issue of, 218, 219.
Urban land, application of the law of diminishing returns to, 127, 128.
Urban rents, nature of, 334–338.
Utility, definition of, 20–22. *See* Diminishing utility, Marginal utility.
Utopian socialism, leaders of, 371.

Value, relations of money to, 199, 200. *See* Consumption, Demand, Supply.
Variety stores, business of, 178, 179.

Wage-earners, number in the United States, 298.
Wages, nature and character of, 295–308. *See* Labor, American Federation of Labor, Organized labor.
Wagon roads, influence of, 155.
Wants, nature of, 32, 33; variation in the intensity of, 40; limitations on, 41, 42; relation of social progress to, 42–44.
Waste, sin of, 72; reasons for, 118, 144, 145.
Water power, place in industry of, 120.
Waterways, influence of, 154, 155.
Wealth, welfare and, 9–12; nature of, 10, 11; distribution of, 12, 285–287; confers power on its possessor, 31, 32.
Wealth of Nations, influence of, 141; extract from, 142.
Welfare, wealth and, 9–12.
Wheat, fixed price of, 192, 193.
Wholesaler. *See* Middleman.
Women, in industry, 305, 306.
Workmen's compensation laws, extent of, 390, 391.